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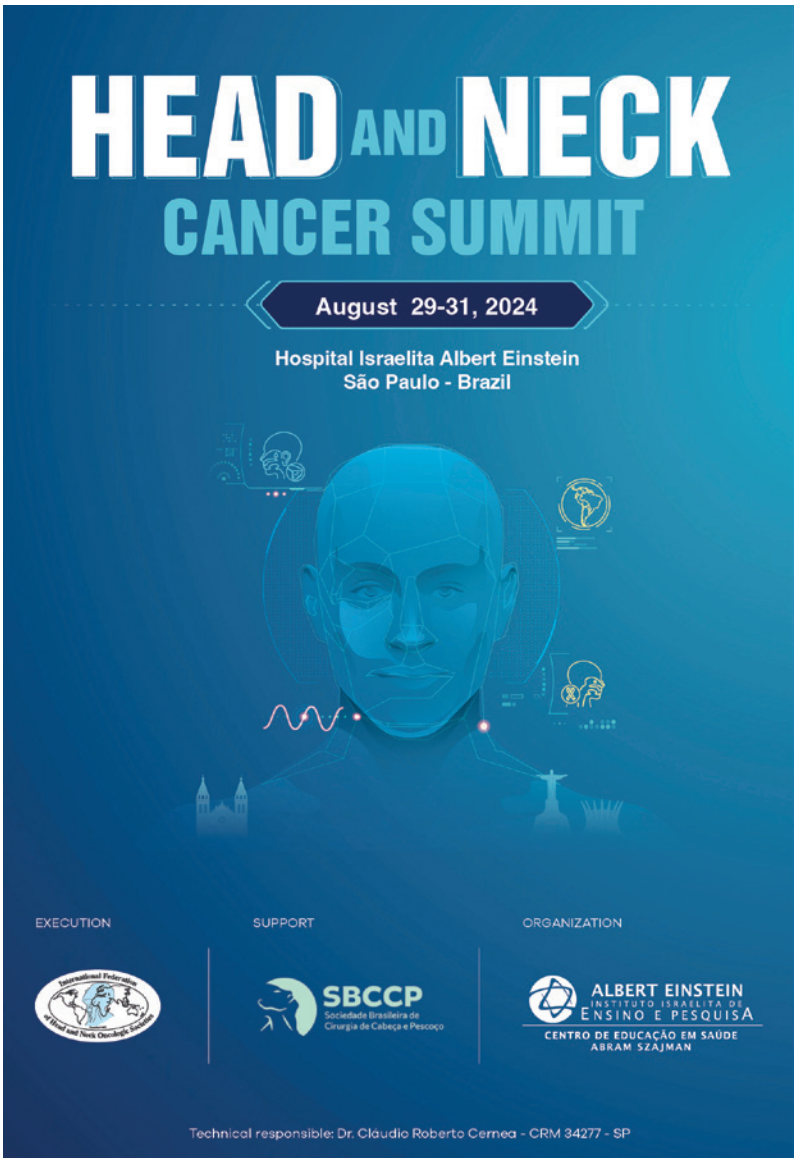

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INSTRUCTIONS FOR AUTHORS

Welcome Address

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Head and Neck Cancer Summit

Dear Colleagues,
The International Federation of Head and Neck Oncologic Societies (IFHNOS) was founded in 1987. Over the years it has conducted numerous programs of continuing education, including quadrennial world congresses, the very popular world tour program and offers on line educational resources on its web site www.ifhnos.net. It also conducts a Global On Line Fellowship (GOLF) program and approves centers of excellence around the world for hands on training in Head and Neck Surgery and Oncology.

This year, IFHNOS introduced a new program called the "Head and Neck Cancer Summit", a comprehensive multidisciplinary didactic program covering the entire field of head and neck surgery and oncology. The main focus of the Scientific Program was the Multidisciplinary Approach of Head and Neck Cancers.

The format included lectures, panel discussions, tumor boards and video sessions on operative techniques. The first Summit was held in Chennai, India, from February 16-18, 2024.

The second Summit was held at the *Hospital Israelita Albert Einstein*, in Sao Paulo, Brazil, from August 29-31, 2024. The program was of traveling faculty from Memorial Sloan Kettering from New York, MD Anderson from Houston and the University of Toronto. These experts interacted with leaders in the field from several countries from South America. This unique initiative of IFHNOS promised to be a most exciting and state of the art conference in recent years in this part of the world. We appreciate everyone's participation.

The present Supplement of einstein includes 51 poster abstracts submitted to the IFHNOS Summit in São Paulo, Brazil.

Jatin Shah
CEO IFHNOS

Claudio R. Cernea
Coordinator

Fernando L. Dias
Coordinator

Luiz P. Kowalski
Coordinator

Editorial

CONTENTS

Multidisciplinary approach in head and neck cancer

Claudio R. Cernea[1,2], Ana Kober Leite[3], Bruno Figueiredo Muller[1], Leandro Luongo de Matos[3]

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The state of the art in the management of the Head and Neck cancer is the multidisciplinary approach (MDA), preferably in a Tumor Board setting including not only Medical Doctors of several specialties (Head and Neck Surgeons, Otolaryngologists, Plastic Surgeons, Clinical and Radiation Oncologists, Radiologists and Pathologists, Endocrinologists and Nuclear Medicine Specialists, among others), but other health professionals (Speech Therapists, Nurses, Physical Therapists and Psychologists, among others) as well.[1] However, it is important to emphasize that, in some less favored environments, there are some socioeconomic logistic restrains which may impair in real life the effective establishment of a truly MDA.[2]

The initial impact of the coordinated MDA is evident from the initial steps of the diagnosis. It is highly recommended to have a dedicated Head and Neck Radiology team, to offer the Health team a thorough imaging evaluation,[3] especially when a salvage procedure is required.[4,5]

Recently, the importance of the MDA in a Tumor Board setting has become very clear in the proper therapeutic decision process in some specific Head and Neck cancers. Following, there are some very eloquent examples of these tumors.

The therapeutic decisions of patients with HPV+ oropharyngeal cancers have been influenced by peculiarities of these tumors, very prevalent during the last 2 to 3 decades, especially in USA and Europe. Due to their marked chemoradiotherapy sensitivity, as well as to the development of less invasive transoral surgical approaches, like transoral laser microsurgery (TLM) and transoral robotic surgery (TORS), there has been a trend to decrease the impact of the treatment morbidity, preserving the high levels of disease-free survival with good quality of life.[6-10] Another potential tool for the initial staging[11] and post-treatment surveillance[12] is the dosage of human

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papillomavirus circulating tumor DNA in patients with HPV+ oropharyngeal cancers.

Another very important advancement offered by the MDA is the treatment of anaplastic thyroid cancer. This is one of the most lethal human malignant tumors, and the patient's survival rarely exceeded one year. However, MDA in some referral centers in Europe and USA have opened a new therapeutic perspective for V600E+ undifferentiated thyroid carcinomas, offering a 2-year disease-free survival rate over 80% of the cases.[13-16]

Finally, patients with very advanced cutaneous squamous cell carcinoma of the Head and Neck present with a formidable therapeutic challenge, due to the involvement of vital parts of the central nervous system and of the orbit. The conventional surgical treatment usually leads to disfiguring craniofacial defects, reconstructed by complex free flaps, with significant morbidity and mortality.[17] Recently, MDA incorporating immunotherapy has added improved cure rates, decreased the surgical morbidity, and even obtaining long-term local control in patients previously considered inoperable.[18-21]

In summary, the increasing tendency of managing advanced cancers of the Head and Neck with MDA, usually in Tumor Boards, has resulted in improved disease-free survival results, with best functional outcomes and less aggressive operations.

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- *Alírio Mijares - Director of the Head and Neck Departament, Trindad Medical Teaching Centre, Venezuela.*

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International Speakers

Alan Ho

I am a translational clinical researcher on the head/neck medical oncology service at Memorial Sloan Kettering Cancer Center (MSKCC). The discovery of novel therapeutics for cancers of the head and neck is a central clinical and research focus for me. As an MD/PhD, I have had extensive clinical and laboratory science training that enables me to translate complex scientific findings into clinical investigations. I have built translational research programs in head and neck squamous cell carcinomas, thyroid cancers and salivary gland cancers.

Danny Enepekides

Dr. Enepekides is currently an associate professor of Otolaryngology-Head and Neck Surgery. He is the Chief of the Department of Otolaryngology at Sunnybrook Health Sciences Centre and the Chief of the division of Surgical Oncology at the Odette Cancer Centre. He is also a Surgical Oncology Regional Lead for Cancer Care Ontario.

Ehab Hanna

Ehab Hanna, M.D., FACS, is an internationally recognized head and neck surgeon and expert in the treatment of patients with skull base tumors and head and neck cancer. Dr. Hanna is currently a Professor and Vice Chair of the Department of Head and Neck Surgery with a joint appointment in the Department of Neurosurgery, MD Anderson Cancer Center. He also serves as an Adjunct Professor of Otolaryngology and Head and Neck Surgery at Baylor College of Medicine. He served as the medical director of the Multidisciplinary Head and Neck Center for 20 years (2004-2023) and is currently the director of the Skull Base Tumor program. For the last 15 years, Dr. Hanna has consistently been named one of America's Best Doctors and Top Doctors in Cancer.

Ian Ganly

I am a surgeon who cares for people with cancerous and noncancerous tumors in the head and neck. This includes tumors of the mouth, throat, larynx (voicebox), esophagus, sinuses, thyroid gland, salivary glands, head and neck skin cancer, and melanoma.I trained in otolaryngology (study of diseases in nose and throat), general surgery, and plastic surgery. This broad experience gave me the surgical, endoscopic, and microsurgical skills necessary to treat head and neck tumors.

Jatin P. Shah

Jatin P. Shah, M.D, holds The Elliott W. Strong Chair in Head and Neck Oncology at Memorial Sloan Kettering Cancer Center in New York. He has published 14 medical textbooks and more than 670 peer reviewed articles. He has received Honorary Fellowships from the Royal Colleges of Surgeons of England, Ireland, Edinburgh and Australia, Honorary PhD and DSc degrees from Belgium, Greece and India and numerous medals and Honors from every corner of the world. He founded the International Federation of Head and Neck Oncologic Societies and serves as it's Chief Executive Officer.

Neil Gross

Neil D. Gross, M.D., FACS, is a surgeon-scientist with a very active clinical practice solely devoted to treating head and neck cancer patients. He currently serves as the Director of Clinical Research in the Department of Head and Neck Surgery at MD Anderson Cancer Center with a focus on surgery-related clinical trials. He has a strong clinical and research interest in squamous cell carcinoma of the head and neck (SCCHN) including oropharynx cancer.

Pankaj Chaturvedi

Professor Pankaj Chaturvedi is Head Neck Cancer Surgeon and Director, ACTREC, Tata Memorial Centre, Mumbai. He has been invited as visiting faculty in 44 institutions in 32 countries. He is the editor of the Textbook of Head and Neck Surgery. He is the Associate Editor of the International Journal of Head and Neck surgery. He has authored more than 200 papers in international peer reviewed journals. He is the principal investigator of several pivotal randomized clinical trials. His main area of interest is prevention and early detection of oral cancer. He is the recipient of the prestigious NIH R01 grant for research on tobacco carcinogenesis.

Ralph Gilbert

Dr Ralph Gilbert is a graduate of the University of Toronto Faculty of Medicine and completed his postgraduate training in Otolaryngology/H&N Surgery at the University of Toronto. Dr Gilbert completed two advanced training fellowships in Head and Neck Surgery at the University of Toronto and Reconstructive Microsurgery at the University of Linkoping in Sweden. He currently serves as the Head of the Department of Otolaryngology/H&N Surgery and the Gullane/O'Neil Chair in Otolaryngology/H&N Surgery at the University Health Network and is a Full Professor in the Department of Otolaryngology/ H&N Surgery at the University of Toronto. Dr Gilbert has previously served in a number of administrative and leadership roles including, the Head of Surgical Oncology at The Odette Cancer Centre in Toronto, Chair of the Medical Advisory Committee at the University Health Network and President of The International Academy of Oral Oncology.

Sean McBride

I am a board-certified radiation oncologist with an expertise in treating primary genitourinary (prostate, bladder, kidney, and testicular) and head and neck (oral cavity, base of tongue, tonsil, larynx, hypopharynx, sinus, nasopharynx, and thyroid) malignancies. I work with a dedicated team of medical oncologists, surgeons, and medical physicists to help deliver individualized care using sophisticated radiation therapy techniques including image-guided, stereotactic radiosurgery (IGRT), intensity modulated radiation therapy (IMRT), and brachytherapy.

National Speakers

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Head and Neck Surgeon graduated from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP), with residencies in General Surgery and Head and Neck Surgery at the *Hospital das Clínicas* of the same institution. Completed a Clinical Fellowship in Thyroid and Parathyroid Surgery at the Massachusetts Eye and Ear Infirmary and Massachusetts General Hospital.

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PhD, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

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Antonio J. Gonçalves

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Artur Malzyner

Assistant Professor, Department of Radiology and Oncology, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP) (1981 – 1995). Assistant Doctor, Department of Surgery, Oncology Sector, FMUSP (2003 – 2010). Head, Oncology Department, Administrative Management Unit I, *Secretaria de Estado de Saúde de São Paulo*. Clinical Oncologist, *Hospital Israelita Albert Einstein* (since 1977). Consultant in Oncology, Medical Oncology Clinic.

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Medical degree from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP), with a residency in Head and Neck Surgery (HNS) from the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). He has been working in the city of Jundiaí - SP for 32 years.

Beatriz Cavalheiro

Head and Neck Surgeon. Associate Professor in the Department of Surgery of the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Assistant physician at the *Instituto do Câncer do Estado de São Paulo* (ICESP). Coordinator of the Head and Neck Surgery Service at the *Instituto Brasileiro de Controle do Cancer* (IBCC).

Belmiro J. De Matos

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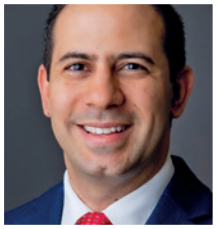

Bruno Albuquerque

Head of the Head and Neck Surgery Section at the *Instituto Nacional de Câncer* (INCA) and the *Hospital de Cancer* (HCA), with a Master's in Surgical Sciences from the *Universidade Federal do Rio de Janeiro* (UFRJ). Postgraduate in reconstructive microsurgery from the Autonomous University of Barcelona. Specialist in craniomaxillofacial surgery.

Carlos A. F. De Freitas

Physician specializing in general surgery and head and neck surgery at the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HCFMUSP), with a PhD from the same institution. Full Professor at the *Universidade Federal de Mato Grosso do Sul* (UFMS). Head of the HNS oncology service at the *Hospital de Câncer Alfredo Abrão*, MS.

Carlos Chone

Associate Professor. Coordinator of the Head and Neck and Skull Base Surgery Group. Institute of Otorhinolaryngology and Head and Neck Surgery at *Universidade Estadual de Campinas* (UNICAMP). Head of the Ophthalmology/ Otorhinolaryngology Department.

Carlos Lehn

Director of the Head and Neck Surgery Service at the *Hospital do Servidor Público Estadual de São Paulo.*

Cecília Eugênio

Head and Neck Surgeon, with an Area of Expertise in Palliative Care from the *Associação Médica Brasileira* (AMB). She holds a Master's degree from the *Universidade Federal de São Paulo* (UNIFESP) and a PhD from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Faculty member at *Centro Universitario São Camilo*.

Chin Lin

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Medical Degree, *Universidade Federal de São Paulo* (UNIFESP), 1997. Medical Residency and Postgraduate Studies in Endocrinology and Metabolism, UNIFESP. Volunteer Doctor, Thyroid Outpatient Clinic, São Paulo Hospital - UNIFESP. Coordinator, GMA Medical Assistance Group, *Hospital Israelita Albert Einstein*.

Diogo Raphael Garcia de Oliveira Pereira

Clinical Oncologist at the *Hospital Israelita Albert Einstein*.

Eduardo Weltman

Professor of Radiotherapy at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Medical Coordinator of the Radiotherapy Service at *Hospital Israelita Albert Einstein*. [Former President of the *Sociedade Brasileira de Radioterapia* (2014 - 2017)].

Emerson Favero

Professor of Head and Neck Surgery at the *Universidade de Mogi das Cruzes* (UMC) and *Faculdade das Américas* (FAM), with a Master's in Medicine. Member of the *Colégio Brasileiro de Cirurgiões* (CBC) and the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Robotic surgeon. Surgeon at *Hospital Israelita Albert Einstein*. Head of the Head and Neck Surgery Services at *Hospital São Camilo*, *BP and Mirante Hospital, HSANP Hospital, Unimed Guarulhos.*

Emilson de Queiroz Freitas

Head Physician, Head and Neck Section, *Instituto Nacional de Câncer* (INCA), 1974 - 2021; Master's Degree in Oncology, INCA Centre for Research and Innovation; Professor**,** Postgraduate Course in Head and Neck Surgery, *Pontifícia Universidade Católica do Rio de Janeiro* (PUC-RJ).

Fábio Brodskyn

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Fábio Capelli

Assistant Physician at the *Instituto do Câncer do Estado de São Paulo* (ICESP). PhD in Medical Sciences from the *Faculdade de Medicina, Universidade de São Paulo (FMUSP)*. Director of Professional Defense at the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP).

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Fátima Cristina Mendes de Matos

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Felipe Vanderlei

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Fernanda Vaisman

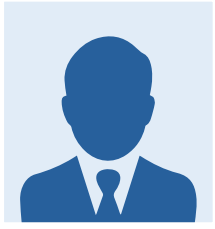
MSKCC Thyroid Cancer Training (2010-2011). Endocrinologist and Researcher at the *Instituto Nacional de Câncer* (INCA), Rio de Janeiro. Associate Professor of Postgraduate Studies in Endocrinology at the *Universidade Federal do Rio de Janeiro* (UFRJ). Board Member of the Department of Thyroid - *Sociedade Brasileira de Endocrinologia e Metabologia* (SBEM) (2023-2024). Board of Directors - Latin American Thyroid Society (2023-2024).

Fernando Cotait Maluf

Dr Fernando Maluf completed his medical studies at the *Faculdade de Ciências Médicas da Santa Casa de São Paulo*, followed by a residency at the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP), and a Fellowship in Clinical Oncology at Memorial Sloan Kettering Cancer Center in New York. He holds a Doctorate in Science/ Doctorate in Urology from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP) and is an associate member of the American Cancer Society. He was Head of the Medical Residency Programme in Clinical Oncology and a member of the Oncology Centre at *Hospital Sírio-Libanês*. He is currently Director of the Clinical Oncology Service at *Hospital BP Mirante* /SP. Member of the Management Committee at *Hospital Israelita Albert Einstein*. He is the author of scientific articles and more than a dozen books published in Brazil and abroad. In December 2018, he was awarded the academic title of Full Professor by the *Faculdade de Ciências Médicas da Santa Casa de São Paulo*.

Fernando Danelon Leonhardt

Otorhinolaryngologist and Head and Neck Surgeon, MSc and PhD from the *Universidade Federal de São Paulo* (UNIFESP).



Fernando José Pinto de Paiva

Head of the Head and Neck Surgery Service, *Liga Norte Riograndense Contra o Câncer*, 2009–2013; Currently a Member of the Service's Staff. Vice-President, Rio Grande do Norte Medical Association, 2007–2011. President, *Cooperativa de Trabalho dos Médicos do Rio Grande do Sul* (COOPMED).

Fernando L. Dias

Head of the Head and Neck Service at the *Instituto Nacional de Câncer* (INCA). Chairman of the Head and Neck Surgery Department at the Graduate School of Medicine, *Pontifícia Universidade Católica do Rio de Janeiro* (PUC-RJ). Researcher in the Molecular Carcinogenesis Program, Postgraduate Studies at the INCA. President of the World Federation of Skull Base Societies (2022-2024). [Former President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP) (1999-2001)].

Fernando Moura

Graduated in Medicine from the *Pontifícia Universidade Católica de Campinas* (PUC-Campinas) (1999). Specialized in Clinical Oncology at the *Instituto Brasileiro de Controle do Câncer* (IBCC) (2004). Experienced in Medicine, Clinical Oncology, and Clinical Research. PhD in Sciences from the *Instituto do Coração, Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (InCor-HC-FMUSP), with a focus on Pulmonary Neoplasms. Clinical Oncologist at the *Centro de Oncologia e Hematologia Einstein Família Dayan Daycoval, Hospital Israelita Albert Einstein*.

Fernando Walder

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Flávio C. Hojaij

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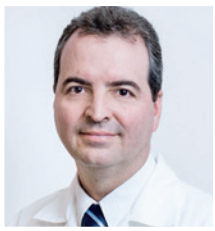
Member of the Head and Neck Surgery and Otorhinolaryngology Department at the *A.C. Camargo Cancer Centre*. PhD in Oncology from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).



Gilberto V. Teixeira

Professor of Surgery at the *Universidade Federal de Santa Catarina* (UFSC), Florianópolis, Brazil. Chief of the Head and Neck Surgery Service at *Centro de Pesquisas Oncológicas* (CEPON), Florianópolis, Brazil. PhD from the *Universidade de São Paulo* (USP), São Paulo, Brazil. Postdoctoral Research Fellowship at Johns Hopkins University, Baltimore, USA.

Gustavo Borges Manta

Head and Neck Surgeon at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP), Assistant Head and Neck Surgeon at the *Instituto do Câncer do Estado de São Paulo* (ICESP).

Gustavo Nader Marta

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Gustavo Nunes Bento

Surgeon specializing in Head and Neck; PhD in Sciences from the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). Faculty member of the Surgery Department in the Medicine course at *Universidade do Vale do Itajaí* (UNIVALI). Member of the deliberative council of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Founding partner of the Pescop Group.

Gustavo Schvartsman

Medical Oncologist at *Hospital Israelita Albert Einstein*. Fellowship in Clinical Oncology at MD Anderson Cancer Centre. PhD from *Hospital Israelita Albert Einstein*.

Gyl A. Ramos

Oncological Surgeon and Head and Neck Surgeon**,** Head of the Head and Neck Surgery Service, *Hospital Erasto Gaertner,* Curitiba. Master's and Doctorate degrees.

Hernán Riveros Ortiz

Head and Neck Surgeon**,** Staff, REVITA Oncology Centre. Head of the Head and Neck Service, *National Cancer Institute.* Head of the Head and Neck Surgery Department, Clínicas Hospital.

Hugo Fontan Kohler

Graduated in Medicine from the *Universidade Estadual de Campinas* (UNICAMP)(1998) and completed a residency in General Surgery at the UNICAMP (1999-2001) and Oncological Surgery at the *A.C. Camargo Cancer Center - Fundação Antônio Prudente* (FAP) (2001-2004). He is a specialist in Head and Neck Surgery and Surgical Cancerology. He is member of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP) and the European Society of Oncological Surgery.

Icaro Thiago de Carvalho

Radiation oncologist at *Hospital Israelita Albert Einstein*.

Ivan Marcelo Gonçalves Agra

Head and Neck Surgeon. Full member of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Professor at the *Faculdade de Medicina da Bahia da Universidade Federal da Bahia* (UFBA). PhD in Oncology from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

Izabella Costa Santos

Deputy Head of the Head and Neck Surgery Service, *Instituto Nacional de Câncer* (INCA); PhD in Clinical Surgery, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP); Coordinator of the Interdisciplinary Head and Neck Laboratory, INCA.

Jacob Kligerman

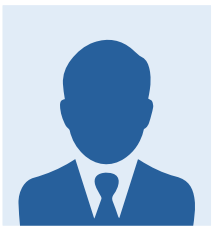
Graduated from the *Escola de Medicina e Cirurgia* (UniRio). Specialized in Cancerology by the *Instituto Nacional de Câncer* (INCA) and in Head and Neck Surgery by the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Full member of the National Academy of Medicine. Former General Director and Head of the Head and Neck Surgery Department at INCA. Founding member of the SBCCP and member of the AHNS and AAORHNS.

João Gonçalves Filho

MD PhD; Specialist in Head and Neck Surgery – Oncology; Head and Neck Surgeon, Head and Neck Tumor Center, *A.C. Camargo Cancer Center*; General Coordinator, Medical Residency Programs, *A.C. Camargo Cancer Center*; PhD in Oncology, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

Jorge Pinho

Internship at Guy's Hospital (University of London) University of Manchester - University of Oxford. Attending Team - Head and Neck Surgery: *Instituto Nacional de Câncer* (INCA) INCA-2 RJ.1986/1987. TCBC - President of the *Colégio Brasileiro de Cirurgiões* (CBC). Member of the American College of Surgeons (FACS). Member of the American Academy of Otolaryngology and Head and Neck Surgery (AAO-HNS).



José Brandão

Head and Neck Surgeon; General Surgeon; *Instituto do Câncer do Estado de São Paulo* (ICESP).

José C. Oliveira

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José F. Salles Chagas

Full Professor of Head and Neck Surgery, *Faculdade São Leopoldo Mandic*, Campinas; Coordinator, *Faculdade Medicina do Sertão* (São Leopoldo Mandic Group), 2019–2022; Coordinator, Surgery Clinic, *Hospital Municipal Dr. Mário Gatti*, Campinas, 2014–2016; Evaluator, BASIS System, *Instituto Nacional de Estudos e Pesquisas* (INEP)/ *Ministério da Educação* (MEC); Specialist in Health Teaching, *Centro de Desenvolvimento de Educação Médica* (CEDEM), *Universidade de São Paulo* (USP).

José Guilherme Vartanian

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José Helder Vasconcelos Filho

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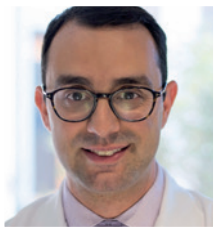
José Roberto V. Podestá

Former President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Coordinator of the Mouth Cancer Prevention and Early Detection Program of the *Secretaria de Estado de Saúde do Espírito Santo* (SESA). Surgeon at the Head and Neck Surgery Service of the *Hospital Santa Rita de Cássia* – Vitória. Head and Neck Surgeon at the *Instituto Podestá De Oncologia* - Vitória E.S.

Júlio Morais

Assistant Professor of Plastic Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Director of the Microsurgery Research Laboratory at FMUSP (LIM 4). Full member of the *Sociedade Brasileira Cirurgia Plástica* (SBCP). Former Director of Accredited Services and of the SBCP Examination Commission. PhD in General Surgery and Residency in Plastic Surgery at FMUSP.



Leandro Luongo de Matos

Full Professor of Head and Neck Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Associate Professor at the *Faculdade Israelita de Ciências da Saúde Albert Einstein* Director of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP).

Lenine Garcia Brandão

University activities: *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP): residency (General Surgery/NHS); *Faculdade de Medicina, Universidade de São Paulo* (FMUSP): master's degree, doctorate, full professorship, full professor (NHS) and Head of the Department of Surgery; *Univerisdade de Santo Amaro* (UNISA) and *Centro Universitário Faculdade de Medicina do ABC (FMABC)*, full professor (NHS). Co-author with Prof Alberto R. Ferraz of the books 'Basic Principles and Technical and Therapeutic Principles' in NHS, in 1998, with 83 and 62 chapters respectively, among other works. President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP) (1985-1987), former editor of the Brazilian Journal of Head and Neck Surgery (1989-1993). Emeritus member of the *Academia de Medicina de São Paulo.*

Leonardo de Siqueira B. Arcoverde

Head and Neck Surgeon at the *Hospital de Câncer de Pernambuco* (HCP). Head and Neck Specialist qualification. Medical Residency Preceptor at the HCP. Head of the Head and Neck Service at *Hospital Esperança Recife*.

Leonardo Haddad

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Leonardo Kruschevsky

Brazilian Head and Neck and Craniofacial Surgeon since 2002; Doctorate in vocal fold paralysis from the *Universidade de São Paulo* (USP) (2006). Robotic head and neck surgeon at *Hospital Israelita Albert Einstein* since 2021. Special professional interest in thyroid and parathyroid disorders.

Luis Carlos Conti De Freitas

Head and Neck Surgeon. MSc and PhD from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). He is currently an Associate Professor at the FMUSP - Ribeirão Preto Campus and Coordinator of the Head and Neck Surgery Service at the *Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto* in Ribeirão Preto - SP.

Luis Ricardo Marca Bueno

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Luiz Paulo Kowalski

Full Professor of Head and Neck Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Head of the Reference Centre for Head and Neck Tumors at the *A.C. Camargo Cancer Center*, former President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP) and of the International Academy of Oral Oncology.

Luiz Roberto Medina dos Santos

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Marcelo Benedito Menezes

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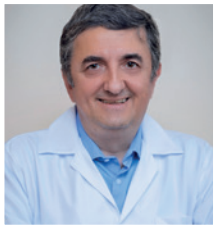
Marcelo Figari

Head and Neck Surgeon, Hospital Italiano de Buenos Aires.

Márcio Abrahão

Full Professor of the Department of Otorhinolaryngology and Head and Neck Surgery at the *Escola Paulista de Medicina - Universidade Federal de São Paulo* (EPM-UNIFESP).



Marco Aurelio Vamondes Kulcsar

Full Faculty Member in Head and Neck Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Head of the Head and Neck Surgery Clinic - *Instituto do Câncer do Estado de São Paulo* (ICESP). PhD Assistant Professor at the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP).

Marcos Brasilino de Carvalho

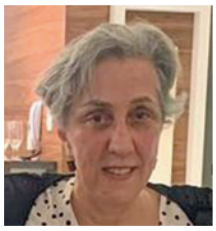
Founder and former Head of the Head and Neck Surgery Service at *Complexo Hospitalar Heliópolis*/São Paulo/Brazil. Former President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). Doctoral Advisor Professor at the Oncology Department of the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

Marcos Roberto Tavares

Head and Neck Surgeon. Full Professor at the Surgery Department of the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Former Head and Neck Surgeon at *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). Former President of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP).

Marcus Antônio de Mello Borba

Head and Neck Surgeon, Associate Professor of Operative Technique at the *Universidade Federal da Bahia* (UFBA). Head of the Head and Neck Surgery Unit at *Real Hospital Português* (RHP). Member of the Head and Neck Surgery Service at the *Hospital Aristides Maltez* (HAM).



Maria Paula Curado

Oncologist with a PHD in Oncology. Head of the Epidemiology and Statistics service at the *A.C. Camargo Cancer Center*. Former editor of Cancer Incidence in Five Continents/IARC.

Mario Augusto Ferrari de Castro

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Mauro Becker Martins Vieira

Head of the Otorhinolaryngology Clinic at *Hospital Felício Rocho* in Belo Horizonte. Graduated in Medicine from the *Universidade Federal de Minas Gerais* (UFMG) in 1984, he trained in General Surgery at the *Hospital Governador Israel Pinheiro* (HGIP – IPSEMG), Head and Neck Surgery at the *Complexo Hospitalar Heliópolis* in São Paulo, and Otorhinolaryngology at the *Hospital Felício Rocho*, with training in all three specialities as well as in Sleep Medicine. He is a member of the Technical Councils of Otorhinolaryngology and Head and Neck Surgery of the Federal Council of Medicine.

Milena Perez Mak

Medical Oncologist at *Oncologia Rede D'Or São Luiz*. She is a member of the Thoracic Oncology and Head and Neck Cancer Group and the *Instituto do Câncer do Estado de São Paulo* (ICESP).

Olívia Galvão de Podestá

She has a degree in Nutrition from *Universidade Vila Velha* (UVV) (2004), a Master's degree in Public Policy and Local Development from *Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória* (EMESCAM) (2011), and a PhD in Oncology from *Fundação Antônio Prudente* (2019). She is currently a postgraduate lecturer in Nutrition, an undergraduate lecturer at *Faculdade Brasileira Multivix Vitória* (MULTIVIX), and an Oncological Nutritionist at the *Instituto Podestá de Oncologia*. She has experience in the field of nutrition, with an emphasis on oncological nutrition, working mainly on the following topics: oncological nutrition, diet therapy, nutritional therapy, nutrition and cancer. She is a member of the *Grupo de Pesquisa em Epidemiologia, Saúde e Nutrição* (GEMNUT), linked to the *Universidade Federal do Espírito Santo* (UFES), and a member of the *Grupo Brasileiro de Câncer de Cabeça e Pescoço* (GBCP).

Oren Smaletz

He graduated in Medicine from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP) (1995), with a residency in Clinical Medicine from *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP) (1996-1998) and specialized in Clinical Oncology from Memorial Sloan Kettering Cancer Center in New York (1999-2002). He is currently a clinical oncologist at *Hospital Israelita Albert Einstein*.

Pablo Montero

Assistant Professor, Surgical Oncology. Attending Surgeon Head and Neck Oncology.

Paola A. G. Pedruzzi

Doctor at the head and neck surgery department of the *Instituto de Oncologia do Paraná* (IOP) and *Erasto Gaertner Hospital*. Founding partner of the *Instituto de Oncologia Integrativa OncoYart.*

Paula Fatturi Moretz-Sohn Carminatti

Surgeon specialized in Head and Neck Surgery by the *Sociedade Brasileira*. She works as an assistant doctor in the Head and Neck service at the *Instituto Nacional de Câncer* (INCA) and the *Hospital Naval Marcílio Dias.* She has a postgraduate degree from *Pontifícia Universidade Católica do Rio de Janeiro* (PUC-RJ). She has trained in Robotic Surgery and is studying for a Master's degree in Oncology.

Paulo Mettig

Head and Neck Surgeon, Salvador, Bahia. PhD, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). President, *Cooperativa de Cirurgia de Cabeça e Pescoço* (CCP-BA).

Pedro Castro Soares

Graduated from the Faculty of Medicine of the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). He works as a pathologist with an emphasis on head and neck and GIT at the *Instituto do Câncer do Estado de São Paulo* (ICESP) and the *Hospital Israelita Albert Einstein.*

Priscila Costa Tincani

Graduated in Medicine from the *Universidade Estadual de Campinas* (UNICAMP). She holds a Master's (2009) and PhD (2013) from the same University in the area of Molecular Biology of Thyroid Cancer. She is a member of the clinical staff at the *Centro de Oncologia Campinas* (COC) and is currently working in Head and Neck Surgery at *Hospital Santa Sofia*, *Hospital e Maternidade Santa Tereza*, *Centro Médico Campinas*, and *Hospital Vera Cruz*. She created the Preventive Laser Therapy for Oral Affections service at the *Centro Médico Campinas*; Certified by *Hospital Israelita Albert Einstein.*

Regina Lúcia Elia Gomes

PhD in Radiology. Radiologist in the Head and Neck Group of the Imaging Department at the *Hospital Israelita Albert Einstein* and the *Instituto de Radiologia do Hospital das Clínicas*, *Faculdade de Medicina, Universidade de São Paulo* (InRad-HC-FMUSP).

Renan Bezerra Lira

Head and Neck Surgeon and Robotic Surgeon. PhD in Oncology from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP). Executive Coordinator of the International Postgraduate Program in Robotic Head and Neck Surgery at the *Hospital Israelita Albert Einstein*.

Renata Lorencetti

Head and Neck Surgeon, *Faculdade de Medicina, Universidade de São Paulo* (FMUSP); Head of the benign thyroid disease outpatient clinic, *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP); MBA in Health Service Management, IT Center of *Fundação Getulio Vargas* (FGV).

Renato de Castro Capuzzo

Head and Neck Surgeon at *Hospital de Amor* de Barretos. Master in oncology. Current scientific director of the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP).

Renato N. Gotoda

Assistant physician at the Department of Head and Neck Surgery, *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). Co-responsible for the salivary gland surgery outpatient clinic at HCFMUSP.

Ricardo Penon

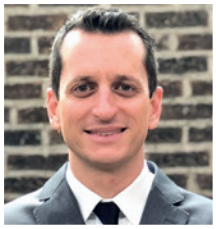
Head and Neck Surgeon; Assistant Physician Head and Neck Surgery Discipline of the *Instituto do Câncer de São Paulo* (ICESP) *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

Ricardo Ribeiro Gama

Specialist in Surgical Cancerology and Head and Neck Surgery. Post-doctorate at the *Universidade Federal de São Paulo (UNIFESP)*. PhD in Oncology from the *Universidade de São Paulo* (USP) (2010). Coordinator of the Head and Neck and Skin Surgery Department at the *Hospital de Amor*. Supervisor of the Oncology postgraduate program at the *Hospital de Amor*. Coordinator of the translational research group in head and neck oncology at the *Hospital de Amor*.

Roberto Araujo Lima

Director of the *Instituto Nacional de Câncer* (INCA) *Hospital do Câncer I* (HC I). Assistant Surgeon - Head and Neck Service - INCA Cancer Hospital.



Rodrigo Munhoz

MD, Phd Oncologist specializing in skin tumors and sarcomas at the Oncology Centre, *Hospital Sírio-Libanês*. Coordinator of the Medical Residency Program in Clinical Oncology, *Hospital Sírio-Libanês*. Coordinator of the Postgraduate Program in Cutaneous Oncology at the *Hospital Sírio-Libanês*.

Rogério Aparecido Dedivitis

Assistant Professor in the Department of Head and Neck Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

Ronaldo Nunes Toledo

Otorhinolaryngologist. Master's and Doctorate from the *Escola Paulista de Medicina - Universidade Federal de São Paulo* (EPM-UNIFESP). Physician at the Head and Neck Surgery and Otorhinolaryngology Department of the *A.C. Camargo Cancer Center* - São Paulo (SP). Doctor at the Centre of the Deaf and Hard of Hearing of EPM-UNIFESP.

Santiago Zund

Specialist in Head and Neck Surgery, Ciudad Autónoma de Buenos Aires (CABA).

Sergio Gonçalves

Head of the Skull Base, Paranasal Sinuses and Nasopharynx Surgery Group of the Head and Neck Surgery Discipline at the *Instituto do Câncer do Estado de São Paulo* (ICESP) and *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). Craniomaxillofacial Surgeon at *Hospital Israelita Albert Einstein*.

Sidney Klajner

Sidney Klajner is a digestive tract surgeon, robotic surgeon, coloproctologist and president of the *Sociedade Beneficente Israelita Brasileira Albert Einstein*. In 2023 he joined the board of directors of the Institute for Healthcare Improvement (IHI), with which Einstein has a strategic alliance. Since 2018, he has been a member of the advisory board of the *Fundação Faculdade de Medicina*, associated with *Universidade de São Paulo* (USP). Klajner is also a professor on the Executive MBA in Healthcare Management at the *Instituto Israelita de Ensino e Pesquisa*. Since 2016, he has been leading the advancement of digital health at Einstein, fostering a culture of incorporating cutting-edge technologies and processes, such as the digitalisation of processes and the intense use of data in decision-making. Because of his leadership in emerging technologies in healthcare, in 2023 he was invited to participate in South by Southwest (SXSW), the largest innovation and technology festival in the world, being the first speaker from a Brazilian healthcare organisation to be part of it. In 2019, he published the book 'The Digital Health Revolution' (Editora dos Editores). He is among the ten Brazilian leaders with the most relevant presence on LinkedIn, according to the *Fundação Getúlio Vargas* (FGV) GVexecutivo magazine and has been a Top Voice in healthcare on the social network since 2020.

Silvia Miguéis Picado Petrarolha

Specialized by the *Sociedade Brasileira de Cirurgia de Cabeça e Pescoço* (SBCCP). She holds a Master's degree from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP) and is a Professor at the *Centro Universitário Fundação Lusíada* (UNILUS).

Terence Pires de Farias

Head and Neck Surgeon. Member of the *Instituto Nacional de Câncer* (INCA). Holds a Master's and Doctorate in Oncology from INCA. Adjunct Researcher at INCA. Head and Neck Professor at *Pontifícia Universidade Católica do Rio de Janeiro* (PUC-RJ). Member of the *Colégio Brasileiro de Cirurgiões* (CBC).

Thadeu Rezende Rangel Fernandes

Specializing in Plastic Surgery at the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP). Specialist in Reconstructive Microsurgery. Head and Neck Reconstruction and Facial Paralysis. Assistant Professor at the *Instituto do Câncer do Estado de São Paulo* (ICESP) HC-FMUSP. Coordinator of the Facial Paralysis Group – HC-FMUSP. Member of the *Sociedade Brasileira Cirurgia Plástica* (SBCP).

Thalita M. Uehara

Dr Thalita Mara Uehara Ybarra graduated in Medicine from the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP) in 2013. In 2017, she completed her residency in Head and Neck Surgery at the *Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo* (HC-FMUSP) and worked as a preceptor in the Head and Neck Surgery discipline.

Thiago B. Oliveira

Department of Clinical Oncology. Vice-leader of the Head and Neck Cancer Reference Centre. Medical Coordinator of the Clinical Research Unit at the *A.C. Camargo Cancer Center* São Paulo (SP).

Vergilius José Furtado de Araujo Filho

Associate Professor of Head and Neck Surgery at the *Faculdade de Medicina, Universidade de São Paulo* (FMUSP).

CONTENTS

Scientific Program

IFHNOS - HEAD AND NECK CANCER SUMMIT 2024 AUGUST 29, 30 AND 31 2024							
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Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
08:00	08:05	00:05	Welcome	Presenter	Sidney Klajner		Sociedade Beneficente Israelita Brasileira Albert Einstein
08:05	08:10	00:05	Welcome and Introduction	Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
08:10	11:00	02:50	SESSION 1 A - STATE OF THE ART AND NEW PERSPECTIVES	International Moderator	Ehab Hanna	Vice Chair of the Department of Head and Neck Surgery	MD Anderson Cancer Center
				International Moderator	Pankaj Chaturvedi	Head Neck Cancer Surgeon and Deputy Director	Tata Memorial Centre
				Secretary	Bruno Simaan França		
08:10	08:30	00:20	Global epidemiology of Head and Neck Cancer	Speaker	Maria P. Curado	Chefe do serviço de epidemiologia e estatitisca	A.C.Camargo Cancer Center
08:30	08:50	00:20	The future of Head and Neck cancer staging	International Speaker	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
08:50	09:10	00:20	New frontiers in diagnostic radiology	Speaker	Regina Lúcia Elia Gomes	Médica radiologista	Hospital Israelita Albert Einstein
09:10	09:30	00:20	Pathologic nuances in Head and Neck tumors	Speaker	Pedro Castro Soares	Patologista com ênfase em Cabeça e Pescoço	Hospital Israelita Albert Einstein
09:30	09:50	00:20	Technological advances in Head and Neck surgery	International Speaker	Danny Enepekides	Surgical Oncology	Universidade de Toronto
09:50	10:10	00:20	Clinical trials – Problems, solutions and opportunities	International Speaker	Pankaj Chaturvedi	Head Neck Cancer Surgeon and Deputy Director	Tata Memorial Centre
10:10	10:30	00:20	Recent advances in Radiation oncology	International Speaker	Sean McBride	Radiation Oncologist	Memorial Sloan-Kettering Cancer Center
10:30	11:00	00:30	Questions and answers				
11:00	11:30	00:30	Coffee break				

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August 29th, 2024 | Thursday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
11:30	13:00	01:30	SESSION 1 B – ORAL CANCER	International Moderator	Neil Gross	Director of Clinical Research in the Department of Head and Neck Surgery	MD Anderson Cancer Center
				Moderator	Luiz Paulo Kowalski	Head do Centro de Referencia em Tumores de Cabeça e Pescoço	A.C.Camargo Cancer Center
				Secretary	Douglas P. Cavalcanti		
11:30	11:45	00:15	Surgical management of oral cancer – Principles and controversies	International Speaker	Ian Ganly	Head and Neck Surgeon	Memorial Sloan-Kettering Cancer Center
11:45	12:00	00:15	Functional restoration of the oral cavity	International Speaker	Ralph Gilbert	Suegeon	Universidade de Toronto
			Tumor board (case discussion panel)	International Panelist	Pankaj Chaturvedi	Head Neck Cancer Surgeon and Deputy Director	Tata Memorial Centre
				Panelist	Ricardo Penón Gonçalves	Médico Assistente Disciplina de Cirurgia de Cabeça e Pescoço	Instituto do Câncer do estado de São Paulo
				Panelist	Luis Ricardo Marca Bueno	Head and neck chief	Hospital Nacional Carlos Alberto Seguin Escobedo EsSalud
				Panelist	Leonardo Kruschevsky	Head and neck & and craniofacial surgeon	Hospital Israelita Albert Einstein
				Panelist	Ricardo Ribeiro Gama	Coordenador do Departamento de Cirurgia de Cabeça e Pescoço e Pele	Hospital de Amor
				Panelist	Gyl A. Ramos		Hospital Erasto Gaertner
12:00	12:20	00:20	Case 1	Presenter	Leandro Luongo de Matos	Professor Associado	Hospital Israelita Albert Einstein
12:20	12:40	00:20	Case 2	Presenter	José Guilherme Vartanian	Director, Head & Neck Surgery and Otorhinolaryngology Department	A.C.Camargo Cancer Center
12:40	13:00	00:20	Case 3	Presenter	Pablo Montero		
13:00	13:30	00:30	Coffee break				
13:30	14:00	00:30	NESTLÉ SATELLITE SYMPOSIUM: Perioperative immunonutrition: Enhancing surgical stages	Presenter	Olívia Galvão de Podestá	Nutricionista oncológica do Instituto Podestá Oncologia e membro do Grupo Brasileiro de Cabeça e Pescoço	Instituto Podestá de Oncologia

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August 29th, 2024 | Thursday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
14:00	15:30	01:30	SESSION 1 C – OROPHARYNX	International Moderator	Danny Enepekides	Surgical Oncology	Universidade de Toronto
				Moderator	Thiago B. Oliveira	Coordenador Médico - Unidade de Pesquisa Clínica	A.C.Camargo Cancer Center
				Secretary	Hugo Machado Silva Neto		
14:00	14:15	00:15	Neoadjuvant systemic therapies for oropharyngeal cancer: Are we ready for de-escalation?	International Speaker	Alan Ho	Head and Neck Medical Oncologist & Cellular Therapist	Memorial Sloan-Kettering Cancer Center
14:15	14:30	00:15	Role of surgical treatment in the multidisciplinary approach to oropharyngeal cancer	International Speaker	Neil Gross	Director of Clinical Research in the Department of Head and Neck Surgery	MD Anderson Cancer Center
			Tumor board (case discussion panel)	Panelists	Eduardo Weltman	Radio-oncologista	Hospital Israelita Albert Einstein
				Panelists	Fernando Danelon Leonhardt	Otorrinolaringologista e Cirurgião de Cabeça e Pescoço	Escola Paulista de Medicina - Universidade Federal de São Paulo
				Panelists	Chin Shien Lin	Médico Cirurgião de Cabeça e Pescoço	Instituto do Câncer do Estado de São Paulo
				Panelists	Hugo Fontan Kohler	Médico Cirurgião e Cabeça e Pescoço	A.C.Camargo Cancer Center
14:30	14:50	00:20	Case 1	Presenter	Renan Bezerra Lira	Coordenador da Pós-Graduação em Cirurgia Robótica de Cabeça e Pescoço	Hospital Israelita Albert Einstein
14:50	15:10	00:20	Case 2	Presenter	Thiago B. Oliveira	Coordenador Médico - Unidade de Pesquisa Clínica	AC Camargo Cancer Center
15:10	15:30	00:20	Case 3	Presenter	Paula Fatturi Moretz-Sohn Carminatti	Médica assistente no serviço de Cabeça e Pescoço	Instituto Nacional de Câncer - INCA
15:30	16:00	00:30	Coffee break				

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August 29th, 2024 | Thursday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
16:00	18:30	02:30	SESSION 1 D – LARYNX	International Moderator	Sean McBride	Radiation Oncologist	Memorial Sloan-Kettering Cancer Center
				Moderator	Jacob Kligerman	Médico Cirurgião	Sociedade Brasileira de Cancerologia e Sociedade Brasileira de Cirurgia de Cabeça e pescoço
				Secretary	Bruna Andressa Quirino		Hospital Israelita Albert Einstein
16:00	16:15	00:15	State of the art of non-surgical organ preservation treatment	International Speaker	Alan Ho	Head and Neck Medical Oncologist & Cellular Therapist	Memorial Sloan-Kettering Cancer Center
16:15	16:30	00:15	Role of surgical treatment in the multidisciplinary approach to advanced laryngeal cancer	International Speaker	Ian Ganly	Head and Neck Surgeon	Memorial Sloan-Kettering Cancer Center
			Tumor board (case discussion panel)	Panelists	Carlos Chone	Coordenador Grupo de Cirurgia de Cabeça e Pescoço e Base de Crânio	Instituto de Otorrinolaringologia e Cirurgia de Cabeça e Pescoço - Universidade Estadual de Campinas
				Panelists	Márcio Abrahão	Professor Titular - Livre Docente do Departamento de Otorrinolaringologia e Cirurgia de Cabeça e Pescoço	Escola Paulista de Medicina - Universidade Federal de São Paulo
				Panelists	Eduardo Weltman	Coordenador Médico do Serviço de Radioterapia	Hospital Israelita Albert Einstein
				Panelists	Carlos Lehn	Diretor do serviço de cirurgia de cabeça e pescoço Hospital do Servidor Publico Estadual de São Paulo.	Hospital do Servidor Público Estadual
16:30	16:50	00:20	Case 1	Presenter	Leonardo Haddad		Escola Paulista de Medicina - Universidade Federal de São Paulo
16:50	17:10	00:20	Case 2	Presenter	Rogério Aparecido Dedivitis	Assistant Professor, Department of Head and Neck Surgery	Faculdade de Medicina, Universidade de São Paulo
17:10	17:30	00:20	Case 3	Presenter	Genival B. De Carvalho	Médico Cirurgião	A.C.Camargo Cancer Center
17:30	18:30	01:00	Video session 1 – Operative techniques	Moderator	Júlio Morais	Prof. Assistente Doutor da disciplina de Cirurgia Plástica	Faculdade de Medicina, Universidade de São Paulo

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August 29th, 2024 | Thursday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
				Moderator	Thadeu Rezende Rangel Fernandes	Coordenador do Grupo de Paralisia Facial	Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Secretary	Thaís B. de Paula		
				Panelists	André Del Negro	Médico	Instituto de Otorrinolaringologia Cirurgia de Cabeça e Pescoço - Universidade Estadual de Campinas
				Panelists	Fabio Brodskyn		Hospital Israelita Albert Einstein
			1. Marginal mandibulectomy	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
			2. Marginal mandibulectomy combined with mandibulotomy	Presenter	Claudio Roberto Cernea	Medico cirurgiao	Hospital Israelita Albert Einstein
			3. Mandibulotomy, resection of the base of the tongue and supraomohyoid neck dissection	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
18:30			Closing remarks				

IFHNOS - HEAD AND NECK CANCER SUMMIT 2024 AUGUST 29, 30 AND 31 2024							
August 30th, 2024 | Friday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
08:00	09:30	01:30	SESSION 2 A – THYROID CANCER 1	Moderator	Danielle Macellaro	Coordenadora do Grupo Médico Assistencial GMA	Hospital Israelita Albert Einstein
				Moderator	Marcos Roberto Tavares	Professor Livre Docente pelo Departamento de Cirurgia	Faculdade de Medicina, Universidade de São Paulo
				Secretary	Daniel R. N. Serrano		Faculdade de Medicina, Universidade de São Paulo
08:00	08:15	00:15	Current practices and controversies in the management of differentiated thyroid cancer	International Speaker	Jatin P. Shah	Professor and E W Strong Chair in Head and Neck Oncology	Memorial Sloan-Kettering Cancer Center
08:15	08:30	00:15	Advances in the management of anaplastic thyroid cancer	International Speaker	Ehab Hanna	Vice Chair of the Department of Head and Neck Surgery	MD Anderson Cancer Center
			Tumor board (case discussion panel)	Panelists	Fernando J. P. de Paiva		Cooperativa Médica do Rio Grande do Norte
				Panelists	Ana A. F. Oliveira Hoff	Chief of Endocrine Oncology	Instituto do Cancer do Estado de São Paulo
				Panelists	Adriana Santos de Oliveira	Médica	Universidade Nove de Julho
				Panelists	Hernán R. Ortiz		
				Panelists	André de Souza Potenza		Hospital Israelita Albert Einstein
08:30	08:50	00:20	Case 1	Presenter	Beatriz Cavalheiro	Médica Coordenadora do Serviço de Cirurgia de Cabeça e Pescoço	Instituto Brasileiro de Controle do Câncer
08:50	09:10	00:20	Case 2	Presenter	Luiz Roberto Medina dos Santos	Médico	Hospital Governador Celso Ramos
09:10	09:30	00:20	Case 3	Presenter	Santiago Zund		Instituto de Oncología Ángel H. Roffo
09:30	10:00	00:30	Coffee break				

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August 30th, 2024 | Friday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
10:00	11:30	01:30	SESSION 2 B – THYROID CANCER 2	Moderator Remoto	Fernanda Vaisman	Endocrinlogist and Researcher	Sociedade Brasileira Endocrinologia Metabologia
				Moderator	Vergilius José Furtado de Araujo Filho	Associate professor of Head and Neck Surgery	Faculdade de Medicina, Universidade de São Paulo
				Secretary	Emidiana Raquel Rodrigues de Souza Oliveira		
10:00	10:15	00:15	Papillary thyroid microcarcinomas: Non-surgical management strategies: Are we ready?	International Speaker	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
10:15	10:30	00:15	Advances in the management of medullary thyroid carcinoma	International Speaker	Ian Ganly	Head and Neck Surgeon	Memorial Sloan-Kettering Cancer Center
			Tumor board (case discussion panel)	Panelists	Flávio C. Hojaij	Cirurgião de cabeça e pescoço	Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Panelists	Izabella Costa Santos		Instituto Nacional de Câncer - INCA
10:30	10:50	00:20	Case 1	Presenter	Felipe Vanderlei	Médico Cirurgião de Cabeça e Pescoço	Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
10:50	11:10	00:20	Case 2	Presenter	Álvaro Sanabria		Universidad de Antioquia
11:10	11:30	00:20	Case 3	Presenter	Claudio Roberto Cernea	Medico cirurgiao	Hospital Israelita Albert Einstein
11:30	12:00	00:30	Postgraduate degree in robotic surgery	Speaker	Luciana Pereira de Magalhaes Machado		Hospital Israelita Albert Einstein
12:00	13:30	01:30	SESSION 2 C – SALIVARY GLAND TUMORS	Moderator	Roberto Araujo Lima	Director	Instituto Nacional de Câncer - INCA
				Moderator	Antonio J. Gonçalves	Professor Titular, Livre Docente do Departamento de Cirurgia	Faculdade de Ciências Médicas da Santa Casa de São Paulo
				Secretary	Klaus Werner Wende		Hospital Israelita Albert Einstein

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August 30th, 2024 | Friday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
12:00	12:15	00:15	Neck treatment in parotid cancers	International Speaker	Ralph Gilbert	Suegeon	Universidade de Toronto
12:15	12:30	00:15	Management of recurrent pleomorphic adenomas	International Speaker	Neil Gross	Director of Clinical Research in the Department of Head and Neck Surgery	MD Anderson Cancer Center
			Tumor board (case discussion panel)	Panelists	José Brandão		
				Panelists	Leonardo de Siqueira B. Arcoverde	Cirurgião de Cabeça e Pescoço	Hospital Esperança Recife
				Panelists	José Helder Vasconcelos Filho	Médico Cirurgião	Hospital de Câncer Aldenora Bello
				Panelists	Fábio Pupo Ceccon	Médico Cirurgião de Cabeça e Pescoço	Hospital Israelita Albert Einstein
12:30	12:50	00:20	Case 1	Presenter	Fernando Walder	Professor Assistente Dep. ORL - Cirurgia de Cabeça e Pescoço	Universidade Federal de São Paulo
12:50	13:10	00:20	Case 2	Presenter	Roberto Araujo Lima	Director	Instituto Nacional de Câncer - INCA
13:10	13:30	00:20	Case 3	Presenter	Gilberto V. Teixeira	Chief of Head and Neck Surgery Service	Centro de Pesquisas Oncológicas
13:30	14:00	00:30	DR. REDDYS SATELLITE SYMPOSIUM: New perspectives on the treatment of nasopharyngeal cancer	Speaker	Pedro De Marchi		
14:00	14:30	00:30	LANG MEDICAL SATELLITE SYMPOSIUM: Sialoendoscopy	Speaker	Silvia Miguéis Picado Petrarolha		Lang Medical
14:30	16:00	01:30	SESSION 2 D – RADIATION AND MEDICAL ONCOLOGY	Moderator	Icaro Thiago de Carvalho	Médico Rádio-oncologista	Hospital Israelita Albert Einstein
				Moderator	Oren Smaletz	Oncologista Clínico	Hospital Israelita Albert Einstein
				Secretary	Iasmin Cava de Sá		
14:30	14:45	00:15	The role of molecular markers in personalized medicine	International Speaker	Alan Ho	Head and Neck Medical Oncologist & Cellular Therapist	Memorial Sloan-Kettering Cancer Center
14:45	15:00	00:15	Revolutionary concepts in radiation oncology	International Speaker	Sean McBride	Radiation Oncologist	Memorial Sloan-Kettering Cancer Center

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...Continuation

August 30th, 2024 | Friday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
			Tumor board (case discussion panel)	Panelists	Fernando Cotait Maluf	Médico Oncologista	Hospital Israelita Albert Einstein
				Panelists	Antonio C. Pellizon	Medico Radio-Oncologista	A.C.Camargo Cancer Center
				Panelists	Artur Malzyner		Hospital Israelita Albert Einstein
				Panelists	Rodrigo Munhoz	Médico oncologista especialista em tumores cutâneos e sarcomas do Centro de Oncologia	Hospital Sírio-Libanês
15:00	15:20	00:20	Case 1	Presenter	Fernando Moura Silva	Gerente Medico Centro Excelencia	Hospital Israelita Albert Einstein
15:20	15:40	00:20	Case 2	Presenter	Milena Perez Mak	Médica Oncologista	Oncologia D´Or
15:40	16:00	00:20	Case 3	Presenter	Gustavo Nader Marta	Médico Titular do Departamento de Radioterapia	Hospital Sírio-Libanês
16:00	16:30	00:30	Coffee break				
16:30	18:30	02:00	SESSION 2 E – Innovations in reconstruction of head and neck oncologic defects	Moderator	Lenine Garcia Brandão	Chefe do Dept de Cirurgia	Faculdade de Medicina, Universidade de São Paulo
				Moderator	Marcelo Figari		
				Secretary	Daniel R. N. Serrano		Faculdade de Medicina, Universidade de São Paulo
16:30	16:50	00:20	Advances in reconstruction of complex mandibular and maxillary defects	International Speaker	Ralph Gilbert	Suegeon	Universidade de Toronto
16:50	17:10	00:20	Reconstruction of complex H&N oncologic defects in a 3rd World Country	International Panelist	Pankaj Chaturvedi	Head Neck Cancer Surgeon and Deputy Director	Tata Memorial Centre
				Speaker	Gabriel Manfro	Cirurgião de Cabeça e Pescoço	Instituto Nacional de Câncer - INCA
				Panelists	Priscila Costa Tincani	Médica Cirurgiã de Cabeça e Pescoço	Hospitais Santa Sofia

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...Continuation

August 30th, 2024 | Friday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
				Panelists	Alberto Mitsuyuki de Brito Kato	Coordenador do Serviço de Cirurgia de Cabeça e Pescoço	Hospital Ophir Loyola
				Panelists	Bruno Albuquerque	Médico Sirurgião	Instituto Nacional de Câncer - INCA
17:10	17:30	00:20	Discussion				
17:30	18:30	01:00	Video session 2 – Operative techniques	Moderator	Renato N. Gotoda	Médico assistente do Departamento de Cirurgia de Cabeça e Pescoço	Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Secretary	Leticia A. Pontes		Faculdade de Medicina, Universidade de São Paulo
				Panelists	Achiles A. L. Machado		
				Panelists	José Roberto V. Podestá	Cirurgião do Serviço de Cirurgia de Cabeça e Pescoço	Hospital Santa Rita de Cássia
				Panelists	José C. Oliveira	Chefe do Serviço e departamento de Cirurgia de Cabeça e Pescoço	Hospital de Câncer Araújo Jorge e Hospital das Clínicas da Universidade Federal de Goiás
			1. Algorithm for laryngeal nerve monitoring in thyroidectomy	Presenter	Claudio Roberto Cernea	Medico cirurgiao	Hospital Israelita Albert Einstein
			2. Excision of deep lobe parotid tumor	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
			3. Total thyroidectomy and central compartment node dissection	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
18:30			Closing remarks				

IFHNOS - HEAD AND NECK CANCER SUMMIT 2024 AUGUST 29, 30 AND 31 2024							
August 31st, 2024 | Saturday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
08:00	09:30	01:30	SESSION 3 A – SINONASAL TUMORS AND SKULL BASE	Moderator	Fernando L. Dias	Chief, Head and Neck Service	Instituto Nacional de Câncer - INCA
				Moderator	Fernando Walder	Professor Assistente Dep. ORL - Cirurgia de Cabeça e Pescoço	Universidade Federal de São Paulo
				Secretary	Luiza Helena Crispim da Silva		Faculdade de Medicina, Universidade de São Paulo
08:00	08:15	00:15	Current management of sinonasal undifferentiated carcinoma (SNUC)	International Speaker	Ehab Hanna		MD Anderson Cancer Center
08:15	08:30	00:15	How to manage the orbital invasion?	International Speaker	Danny Enepekides	Surgical Oncology	Universidade de Toronto
			Tumor board (case discussion panel)	Panelists	Fábio Capelli	Médico	Instituto do Câncer de São Paulo
				Panelists	José F. Salles Chagas		Faculdade de Medicina São Leopoldo Mandic
				Panelists	Diogo Raphael Garcia de Oliveira Pereira	Oncologista clínico	Hospital Israelita Albert Einstein
				Panelists	Gustavo Nunes Bento	Cirurgião especialista em cabeça e pescoço	Grupo Pescop
				Panelists	Ronaldo Nunes Toledo	Médico do Departamento de Cirurgia de Cabeça e Pescoço e Otorrinolaringologia	A.C.Camargo Cancer Center
08:30	08:50	00:20	Case 1	Presenter	Sergio Gonçalves	Cirurgião Craniomaxilofacial	Hospital Israelita Albert Einstein
08:50	09:10	00:20	Case 2	Presenter	Renato de Castro Capuzzo	Cirurgião de Cabeça e Pescoço do Hospital Mestre em oncologia	Hospital de Amor
09:10	09:30	00:20	Case 3	Presenter	Terence Pires de Farias	Titular Cabeça Pescoço	Instituto Nacional de Câncer - INCA
09:30	10:00	00:30	Coffee break				

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August 31st, 2024 | Saturday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
10:00	11:30	01:30	SESSION 3 B – SKIN CANCERS	Moderator	Gustavo Schvartsman	Médico Oncologista	Hospital Israelita Albert Einstein
				Moderator	André Bandiera de Oliveira Santos	Chefe do serviço de tumores cutâneos e sarcomas na cirurgia de cabeça e pescoço	Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Secretary	Lucas Gasperini Barreiros		
10:00	10:15	00:15	Immunotherapy for advanced non-melanoma skin cancers	International Speaker	Alan Ho	Head and Neck Medical Oncologist & Cellular Therapist	Memorial Sloan-Kettering Cancer Center
10:15	10:30	00:15	Surgical pearls for the resection of advanced non-melanoma skin cancers	International Speaker	Ralph Gilbert	Suegeon	Universidade de Toronto
			Tumor board (case discussion panel)	Panelists	Paulo Guilherme Mettig Rocha		
				Panelists	Daniel M. Ramos	Médico assistente	Instituto do Câncer do Estado de São Paulo
				Panelists	Luis Carlos Conti De Freitas	Coordenador do Serviço de Cirurgia de Cabeça e Pescoço	Hospital das Clínicas, Faculdade de Medicina de Ribeirão Preto
				Panelists	Paola A. G. Pedruzzi	Médica do departamento de cirurgia de cabeça e pescoço	Instituto de Oncologia do Paraná e Hospital Erasto Gaertner
				Panelists	Renata R. G. Lorenceti Mahmoud		Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
10:30	10:45	00:15	Case 1	Presenter	Bernado Cacciari Peryassú		Instituto Nacional de Câncer - INCA
10:45	11:00	00:15	Case 2	Presenter	Gustavo Schvartsman	Médico Oncologista	Hospital Israelita Albert Einstein
11:00	11:15	00:15	Case 3	Presenter	Jorge Pinho	Attending Staff Head and Neck Surgery	Colégio Brasileiro de Cirurgiões
11:15	11:30	00:15	Case 4	Presenter	João Gonçalves Filho		A.C.Camargo Cancer Center
11:30	12:00	00:30	Einstein Teaching	Speaker	Juliana Santana de Freitas		Hospital Israelita Albert Einstein

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August 31st, 2024 | Saturday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
12:00	13:30	01:30	SESSION 3 C – PARAPHARYNGEAL SPACE TUMORS	Moderator	Alfio Tincani	Professor Titular e Coordenador da Disciplina de Cirurgia de Cabeça e Pescoço	Universidade Estadual de Campinas
				Moderator	Marcos Brasilino de Carvalho	Professor orientador de Doutorado da Disciplina de Oncologia	Faculdade de Medicina, Universidade de São Paulo
				Secretary	Matheus Soares Buissa		
12:00	12:15	00:15	TORS for parapharyngeal space tumors	International Speaker	Neil Gross	Director of Clinical Research in the Department of Head and Neck Surgery	MD Anderson Cancer Center
12:15	12:30	00:15	Surgical treatment of carotid body tumors	International Speaker	Ehab Hanna		MD Anderson Cancer Center
			Tumor board (case discussion panel)	Panelists	Emerson Favero	Médico Cirurgião	Hospital Israelita Albert Einstein
				Panelists	Belmiro J. De Matos	Supervisor do Serviço de Cirurgia de Cabeça e Pescoço	Hospital Santa Marcelina
				Panelists	Ana Cecília C. Almeida		Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Panelists	Carlos A. F. De Freitas	Chefe do Serviço de CCP oncológica	Hospital de Câncer Alfredo Abrão
				Panelists	Marcelo Benedito Menezes	Chefe do Serviço de Cirurgia de Cabeça e Pescoço	Irmandade da Santa Casa de Misericórdia de São Paulo
12:30	12:50	00:20	Case 1	Presenter	Alírio Mijares		
12:50	13:10	00:20	Case 2	Presenter	Alejandro Ring		
13:10	13:30	00:20	Case 3	Presenter	Marcus Antônio de Mello Borba	Associate Professor of Operative Technique	Hospital Português da Bahia
13:30	14:00	00:30	ADIUM SATELLITE SYMPOSIUM: Immunotherapy for advanced non-melanoma skin cancers	Speaker	Gustavo Schvartsman	Médico Oncologista	Hospital Israelita Albert Einstein
14:00	14:30	00:30	Coffee break				

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...Continuation

August 31st, 2024 | Saturday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
14:30	16:00	01:30	SESSION 3 D – MISCELLANEOUS	Moderator	Fátima Cristina Mendes de Matos	Coordenadora da Cirurgia de Cabeça e Pescoço da Universidade Estadual de Pernambuco	Universidade Estadual de Pernambuco
				Moderator	Marco A. V. Kulcsar		Instituto do Câncer do Estado de São Paulo
				Secretary	Ricardo Z. T. Chaves		
14:30	14:45	00:15	The multidisciplinary treatment of sarcomas of the Head and Neck	International Speaker	Ehab Hanna		MD Anderson Cancer Center
14:45	15:00	00:15	Long term complications and sequelae after chemo-radiotherapy in the head and neck	International Speaker	Sean McBride	Radiation Oncologist	Memorial Sloan-Kettering Cancer Center
			Tumor board (case discussion panel	Panelists	Mario Augusto Ferrari de Castro	Coordenador do Núcleo de Desenvolvimento Docente	Universidade Metropolitana de Santos
				Panelists	Augusto Dutra Jr.	Médico	, Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo
				Panelists	Emilson de Queiroz Freitas		Pontifícia Universidade Católica do Rio de Janeiro
				Panelists	André Leonardo C. Costa		Hospital Aristides Maltez
15:00	15:20	00:20	Case 1	Presenter	Gustavo Borges Manta	Médico Assistente de Cirurgia de Cabeça e Pescoço	Instituto do Câncer do Estado de São Paulo
15:20	15:40	00:20	Case 2	Presenter	Ivan Marcelo Gonçalves Agra	Médico e Professor	Faculdade de Medicina da Bahia
15:40	16:00	00:20	Case 3	Presenter	André V. Guimarães		Faculdade de Medicina, Universidade de São Paulo
16:00	16:30	00:30	Coffee break				
16:30	17:30	01:00	Video session 3 – Operative techniques	Moderator	Ana Kober Leite		Hospital Israelita Albert Einstein
				Moderator	Cecília Eugênio	Cirurgiã de Cabeça e Pescoço	Centro Universitário São Camilo
				Secretary	Camila Gomes de Souza		
				Panelists	Thalita M. Uehara		Faculdade de Medicina, Universidade de São Paulo

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August 31st, 2024 | Saturday							
Time Start	**Time Finish**	**Duration**	**Activity**	**Activity Speaker/ Moderator**	**Name Speaker/ Moderator**	**Speaker/Moderator**	**Instituition**
				Panelists	Mauro Becker Martins Vieira	Head of the Otorhinolaryngology Clinic	SIMPÓSIO SATÉLITE NESTLÉ:
			1. Excision of a carotid body tumor	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
			2. Maxillary swing for resection of tumors of the infraDurationral fossa	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center
			3. Crico tracheal resection and reconstruction for locally advanced thyroid cancer	International Presenter	Jatin P. Shah	Vice Chair of the Department of Head and Neck Surgery	Memorial Sloan-Kettering Cancer Center

CONTENTS

Presentation Abstracts

001

Ex vivo surgical margin assessment of oral cancer with PARPi-FL: initial report

Giovanna Luiza Caxeiro[1], Paula Demetrio de Souza Franca[1,2,3], Joo Sun Mun[1], Tara Viray[1], Helena Levyn[3], Charlie White[4], Audrey Mauguen[4], Christian Brand[5], Thomas Reiner[1,6], Ronald Ghossein[7], Ian Ganly[3], Naga Vara Kishore Pillarsetty[1,7], Snehal G. Patel[3]

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ABSTRACT

Introduction: Surgical resection is the standard of care for Oral Squamous Cell Carcinoma (OSCC) and the surgeon's ability to secure negative resection margins is associated with a reduced risk of local recurrence and improved survival rates.(1) Optimal functional outcomes are dependent on the balance between adequate surgical resection for complete removal of cancer and preservation of normal tissue to preserve essential functions such as swallowing, speaking, and breathing. Currently, histopathologic examination of the surgical resection specimen is the gold standard for margin assessment, yet it is time consuming and does not allow the surgeon intraoperative modification of the resection. Intraoperative frozen section is widely used but has significant limitations.(2) There is therefore a need for novel intraoperative imaging tools that can rapidly assess margin status by comprehensive examination of the excised surgical specimen in the operating room.

Objective: Our team has explored the applications of PARPi-FL for molecular imaging of several cancers including OSCC.(3) PARPi-FL is a small molecule that targets poly-ADP ribose polymerase 1 (PARP1), an enzyme involved in DNA damage. We hypothesize that PARPi-FL is able to differentiate tumor cells from adjoining benign tissue in surgical specimens of OSCC and therefore, would be a rapid and reliable method of intra-operative margin assessment during surgery. In this pilot study, our aim was to analyze the fluorescence signal of PARPi-FL in tumor versus marginal normal tissue after topical application in OSCC specimens immediately after surgical resection.

Methods: Previously untreated patients undergoing definitive surgery as their primary therapy for OSCC were eligible for the study (IRB 20-422). Immediately after surgical resection, the fresh surgical specimen (tumor and surrounding tissue) was submerged *en bloc* in 100mL of a solution containing 1,000nM of

PARPi-FL in 30% PEG/PBS. Mucosal margins were imaged using a Quest Spectrum imaging device with an endoscopic camera and a PARPi-FL optimized LED–filter system, testing three different exposure times (30ms, 60ms, and 80ms). The specimen was then sectioned by the study pathologist per standard of care, and the sectioned specimen was imaged again after submersion in PARPi-FL to study depth of infiltration. Biopsies of the transition between margins and tumor were performed to compare the fluorescence imaging results with the standard H&E, and PARP1 expression on immunohistochemistry (IHC), and fluorescence imaging. All fluorescent images were analyzed in ImageJ by quantifying the average radiant efficiency of the PARPi-FL signal in regions of interest placed in tumor and normal tissue. For the statistical analysis, a GEE model was used to determine the association between uptake values and tissue, exposure time, and section (surface vs depth).

Results: In the preliminary analysis of 8 patients of this ongoing study we observed a tumor mucosa fluorescence in average 2.85 times higher than in normal, adjusting for section and exposure time ($p<0.001$). Analyzing the IHC and H&E slides on tumor sections, we could confirm higher levels of PARP1 expression in the tumor areas, aligning with the higher fluorescent signals observed on the QUEST images (Figure 1). A major advantage of our method is that we were able to study wide areas of interest on the *ex vivo* specimens, including the evident malignant tissue and transition to normal tissue.

Conclusion: PARPi-FL based *ex vivo* molecular imaging of surgically resected specimens holds promise for rapid and comprehensive intraoperative assessment of surgical margins in OSCC.

Keywords: Oral cancer; Surgical margins; Optical imaging; PARP1

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SGPP number: Not applicable.

CAAE: Not applicable.

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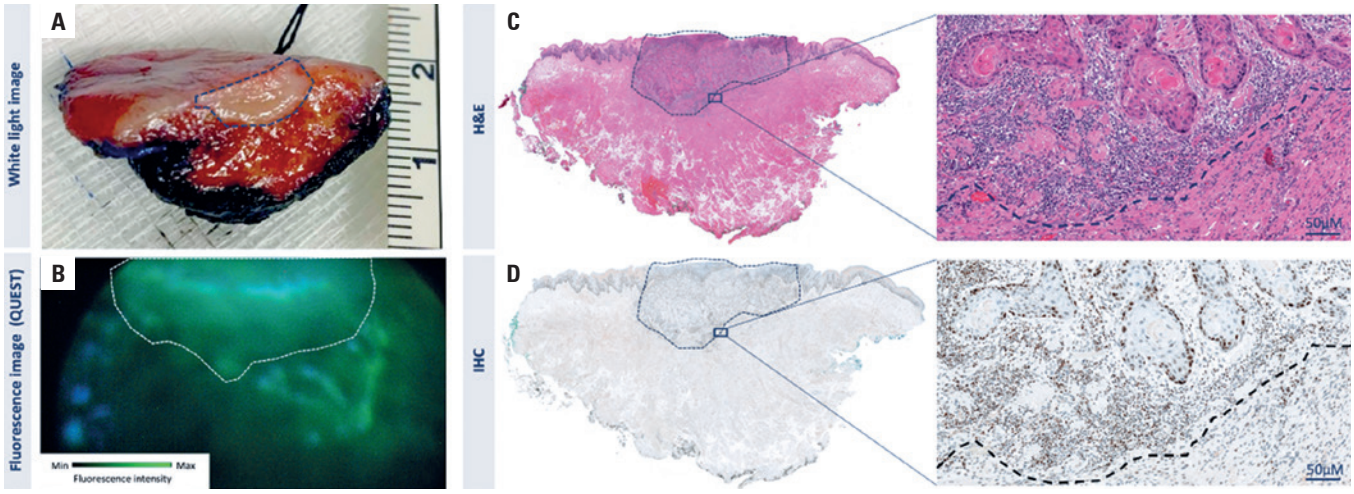

Figure 1. Representative images of a patient tumor resection with Oral Cavity Squamous Cell Carcinoma (OSCC) at macroscopic and microscopic levels. (A) Gross view showing the depth of the tumor and deep soft tissue margin after sectioning the specimen (blue line). (B) Corresponding PARPi-FL imaging of the sectioned specimen delineating fluorescence in the tumor (white line). (C) H&E images depicting the depth of the tumor (blue line) and transition to normal soft tissue in low and high-power views. (D) Representative PARP1 immunohistochemistry low and high-power views showing clear differential staining between tumor (blue line) and normal soft tissue at the "deep margin"

002

Crystal clear: unusual presentation of gouty tophi mimicking thyroid malignancy in a 42-year old male

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ABSTRACT

Introduction: Gout is a metabolic inflammatory disease marked by the accumulation of monosodium urate (MSU) crystals within joints or soft tissues caused by either alteration in the metabolism of purine or excretion of uric acid.(1) The predominant manifestation of gout is characterized by pain on the affected joint, frequently occuring in the first metatarsophalangeal (MTP1) joint. However, it may also result in formation of firm nodules beneath the skin, within and surrounding joints (*i.e.*, ankle, knee, wrist), and even ligaments.(2) While gout affecting the head and neck region is rare, it remains a potential occurrence, with documented cases of gouty tophi in the larynx.(3)

Objective: The objective of this paper is to present a rare case of gouty tophi manifesting as an anterior neck mass on the thyroid cartilage initially suspected to be a thyroid malignancy.

Methods: This is a case report involving one patient in a Tertiary Private Hospital in Metro Manila, Philippines. Written informed consent was obtained from the patient for the publication of this case report.

Results: This is a case of a 42-year-old male presenting with a 2-week history of an anterior neck mass. The patient reported progressive enlargement of the said mass with no pain, dyspnea, dysphagia, and hoarseness. He denied any history of thyroid disorders, radiation exposure, or familial thyroid malignancies. Physical examination revealed a firm, non-tender nodular mass in the midline anterior neck, measuring approximately 4cm in diameter. The overlying skin appeared normal without signs of inflammation or erythema. Given the initial clinical suspicion favoring a neoplastic etiology due to the firm consistency of the mass, further investigations were pursued. Thyroid function tests were within normal limits. Computed tomography revealed well-defined calcified mass centered in the strap muscle between the hyoid bone and thyroid cartilage measuring 3.5 x 1.9 x 3.8 cm. The patient was referred to the endocrinology department for further evaluation and management. Given the clinical suspicion of a neoplastic process, the neck mass was excised. Intraoperatively, the mass was an irregular, firm to hard tissue covered by specks of white tan, chalky deposits firmly adherent to the thyroid cartilage insinuating superiorly into the thyrohyoid junction. However, final histopathology reports the presence of amorphous material with a chalky appearance, consistent with tophaceous deposits. Further analysis of the biopsy specimen confirmed the presence of monosodium urate crystals, confirming the diagnosis of gouty tophi. The patient apparently has a history of recurrent episodes of acute arthritis involving his feet and hands over the past few years. The patient then revealed that he has been diagnosed with gout and has been compliant with Colchicine and Febuxostat. Post-operatively, the patient did not experience a recurrence of the growth as he is being medicated with Colchicine and Febuxostat.

Conclusion: This case underscores the importance of considering uncommon etiologies in the differential diagnosis of neck masses, particularly when clinical presentations diverge from typical patterns. Gouty tophi

rarely involves the thyroid cartilage but has been found to involve laryngeal structures and can mimic neoplastic lesions both clinically and radiologically.[3] Awareness of atypical presentations is crucial for accurate diagnosis and timely management of the said disease. Surgical excision remains to be the logical way to go about the management in such cases, aiming for symptomatic relief and complication prevention. Despite its rarity in the neck, gouty tophi should be considered in the differential diagnosis of anterior neck masses, especially in patients with a history of gout or hyperuricemia.

Keywords: Gout; Tophi; Thyroid cartilage; Neck mass; Thyroid malignancy

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SGPP number: Not applicable.

CAAE: Not applicable.

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Presentation Abstracts

003

Peripheral serpiginous arrangement of punctate hyperechoic foci in thyroid nodules: ultrasonographic aspect suggestive of papillary carcinoma

Laila Daibes Rachid[1], Stefano Spiezia[2], Fernando Luiz Dias[3], Haitham Sharara[4], Fernanda Aguiar Pescador[5], Marianna Daibes Rachid de Andrade[1], Pedro Henrique Mandetta[3], Marilene Filgueira do Nascimento[6]

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ABSTRACT

Introduction: The TIRADS (Thyroid Imaging-Reporting and Data System) classification aims to provide reproducible analysis of thyroid nodules on ultrasound. The presence of punctate hyperechoic foci in thyroid nodules according to the ACR TI-RADS classification adds three points and can be present in both benign and malignant nodules.[1]

Objective: The purpose of this study is to demonstrate the importance of the peripheral serpiginous arrangement of punctate hyperechoic foci in thyroid nodules ultrasound imaging ,diagnosed as papillary carcinomas, regardless of echogenicity.

Methods: The examinations were performed by a single expert thyroid radiologist and a single cytopathologist with over 30 years of experience in their respective specialties, both qualified as members of their respective medical societies through certification exams, considered experienced in thyroid, using a single ultrasound machine from TOSHIBA(MEDICAL SYSTEM CANON) TUSS A300/BL, BLB17Y2027.REG ANVISA: 10295030057 PO:NXC 7612, using a linear transducer with a range of 7.5 to 15 MHz.

Results: The three cases of thyroid nodules (Figure 1) that presented with punctate hyperechoic foci in a "sui generis" peripheral serpiginous pattern had cytopathological and histopathological results of papillary carcinoma.[2,3]

Conclusion: Since microcalcifications are present in both benign and malignant thyroid nodules, the peripheral serpiginous arrangement of the foci was related to the diagnosis of papillary carcinoma in these three cases studied. This characteristic may be related to malignancy and should be described in ultrasound reports.

Keywords: Nodules; Thyroid; Microcalcifications; Papillary

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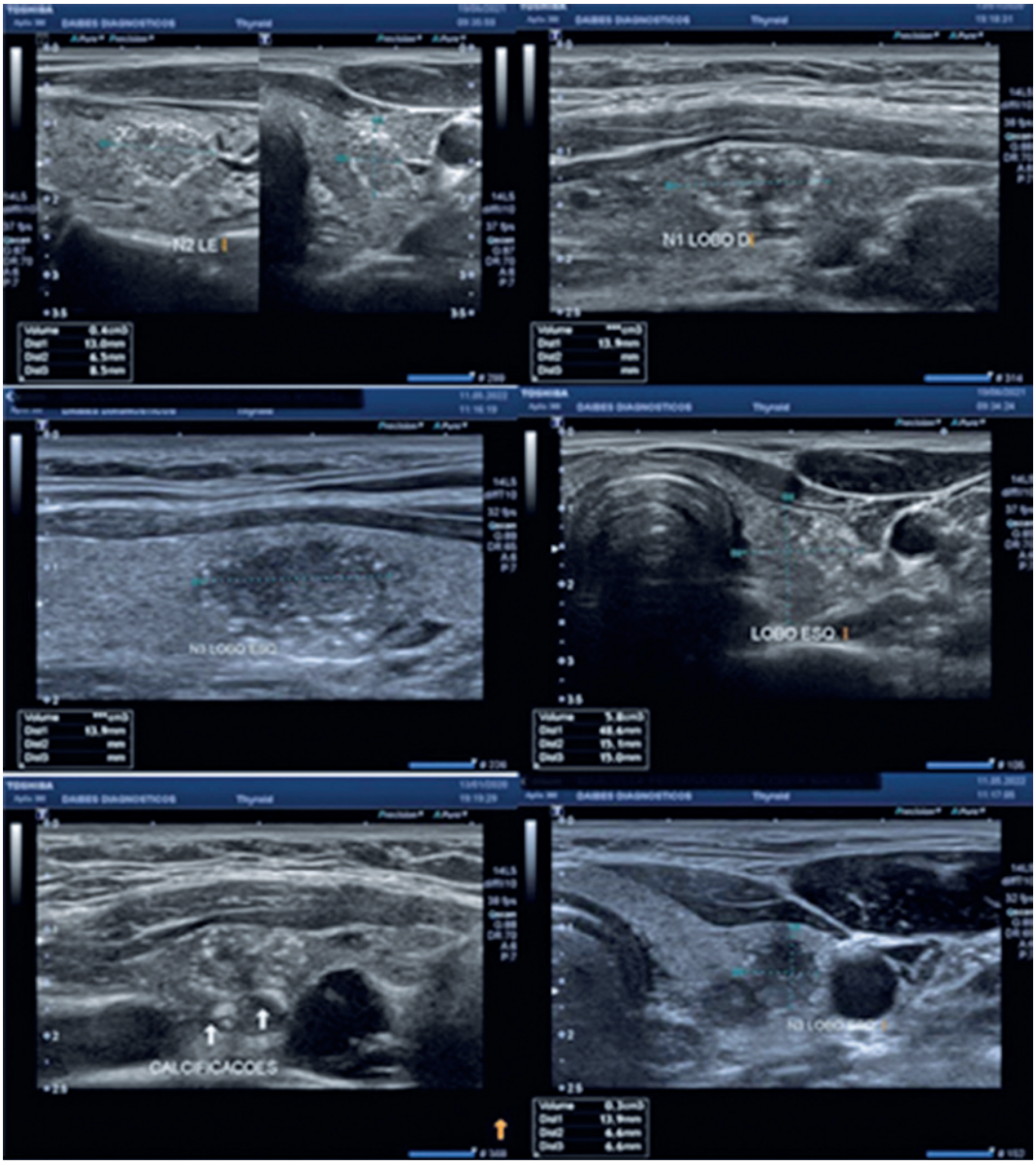

Figure 1. Three cases of thyroid nodules that presented with punctate hyperechoic foci in a "*sui generis*" peripheral serpiginous pattern, which had cytopathological and histopathological results papillary carcinoma

004

Transoral laser surgery in laryngeal cancer, experience at the Complejo Asistencial Barros Luco, Santiago, Chile between 2012 – 2023

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ABSTRACT

Introduction: Laryngeal cancer is the second malignant neoplasm of the upper airway. Treatment options include radiotherapy, transoral laser surgery (TOLS) and partial or total open surgeries.[1] The indications for TOLS include tumors amenable to preservation surgery: T1, T2 and selected T3.[2]

Objectives: The general objective is to describe the oncological results and clinical characteristics of patients diagnosed with laryngeal cancer who were treated with TOLS at the *Complejo Asistencial Barros Luco* (CABL), Santiago, Chile, between 2012 and 2023.

Methods: A descriptive retrospective study was conducted, with the study population being patients diagnosed with laryngeal cancer who were treated with TOLS at the CABL between 2012 and 2023 in the Otorhinolaryngology service.

Results: A total of 60 Transoral Laser Surgeries were performed on 46 patients. The average age was 67 years. A total of 93% were male, 100% of the patients were smoking and 74% had some type of alcohol consumption. Tumors were located in the supraglottis in 7% (n=3), and in the glottis in 93% (n=43). In terms of size, they corresponded to: T1 tumors (61%), T2 (20%), T3 (12%) and Tis (7%). 26% of the patients presented involvement of the anterior commissure. One patient presented metastasis to cervical lymph nodes. Regarding the treatments, the most common were cordectomy type V (41.3%, n=19), followed by cordectomy type IV (13%, n=6) and partial vertical hemilaryngectomy (10.9%). In terms of neck treatment, a total of 21.7% underwent neck dissection. The following complications occurred: 4 patients had transient swallowing disorder, 4 patients had granuloma, 2 patients had postoperative bleeding, and 1 patient presented anterior commissure synechia. Regarding the interventions according to tumor size, 83% were treated only with 1 or 2 TOLS procedures, being T1 (n=25) and T2 (n=8) are mainly treated. Seven patients subsequently required a total laryngectomy as a reintervention. For locoregional control at 2 years of follow-up, 35 patients were included, who completed the follow-up period. A 70% locoregional control was achieved in conjunction with T1 and T2, with a final local control of 90%. The total organ preservation rate was 85%, being 0% for patients with supraglottic location and 91% for patients with glottic location. The overall survival rate at 2 years of follow-up was 86.4%, the specific survival rate at 2 years of follow-up was 94.5%. In tumor size analysis, the specific survival at 2 years of follow-up corresponds to Tis 100%, T1 96,2%, T2 100%, and T3 50%.

Conclusion: The most frequent tumor location treated by TOLS was glottic both in our series (91%) and in the literature.[3] The most frequent tumor size treated was T1 with 61%, which is consistent with the literature.[3] The most frequent type of cordectomy in our series is type V, while in the literature it corresponds to type II and V with similar values. It should be noted that

in our center we also perform epiglotectomy (n=3) and vertical hemilaryngectomy (n=5) via TOLS. Our oncological results are similar in terms of initial and final local control, organ preservation, and survival to the international literature.[3] These differ in the number of reinterventions.[1-3] The complications mentioned are expected events in this type of surgery, and they occur in a similar way to those described in the literature.[1-3] Therefore, TOLS is a valid strategy for patients with laryngeal cancer.

Keywords: Laser therapy; Laryngeal neoplasms

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Presentation Abstracts

005

Video-assisted maxillary artery ligation in resection of adenoid cystic carcinoma: case report

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ABSTRACT

Introduction: The technique of Video-Assisted Maxillary Artery Ligation (VAMAL) aims to reduce bleeding in surgical approaches to regions supplied by the Maxillary Artery (MA). The most common accesses for performing the procedure are the transantral and transvestibular routes. Video assistance for transvestibular ligation is simple, fast, and does not require skin incisions. Its use immediately prior to the procedure provides better surgical margin establishment and better positioning of osteotomies in oncological resections in the upper floor of the mouth, nasal cavity, and maxillary sinus.

Case report: A 60-year-old male patient, an ex-smoker, presented with a nodule in the left hard palate, without reports of pain or bleeding. Physical examination revealed a submucosal tumor in the left hard palate, which was fixed, painless, and without signs of ulceration or bleeding, as well as no palpable cervical lymph nodes. A computed tomography (CT) scan of the face indicated soft tissue thickening with contrast enhancement in the hard palate, in the paramedian left portion, with indistinct limits and apparently no involvement of adjacent bony structures. An incisional biopsy diagnosed adenoid cystic carcinoma, solid, cribriform, and tubular patterns. The patient underwent resection of the infrastructure and floor of the nasal cavity with prior VAMAL via the vestibular approach. Histopathological examination of the surgical specimen indicated infiltration in the oral mucosa and soft tissues, with extension to the adjacent bone tissue. The surgical margins were free of disease, and there was no perineural or lymphovascular invasion.

Discussion: Adenoid cystic carcinoma is an uncommon and aggressive tumor that primarily affects the major salivary glands but can also involve the minor salivary glands distributed in the nasal cavity and paranasal sinuses, trachea, larynx, as well as the lacrimal and ceruminous glands.[1] It commonly presents with perineural invasion and invasion of adjacent tissues, multiple local recurrences, and hematogenous metastases to the lungs, bones, and liver.[1] The gold standard treatment described by various studies remains surgical resection followed by radiotherapy.[1] Achieving disease-free surgical margins is challenging in adenoid cystic carcinoma, often necessitating radical resections[1]. To avoid significant bleeding during such resections in regions supplied by the maxillary artery, VAMAL has proven to be highly effective. Some complications, such as trismus and cheek edema, may limit its indication.[2,3] For VAMAL via the vestibular approach, an incision is made in the sulcus of the upper gingivobuccal mucosa, at the level of the second or third molar. Then, by blunt dissection of the masticatory space, the deep soft tissues are exposed. Bichat's fat pad is displaced posteriorly, providing adequate exposure of the masticatory space

and visualization of the lateral pterygoid muscle (LPM). A 5mm, zero-degree endoscope is then inserted into the created space. The maxillary artery typically crosses transversely over the surface of the LPM towards the pterygopalatine fissure. The ligation of the maxillary artery is performed near the sphenopalatine fissure, downstream of the temporal muscle pedicle (Figure 1).

Final comments: The patient did not require a blood transfusion and recovered without complications, demonstrating the effectiveness of VAMAL in controlling bleeding in the context of radical resection of an aggressive tumor in a region supplied by the maxillary artery.

Keywords: Vídeo-assisted maxillary artery ligation; Adenoid cystic carcinoma; Cancer

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Special thanks to the Head and Neck Surgery League (LCCP) of the *Faculdade de Medicina da Universidade Federal do Ceará*, of which I am president, for the unique opportunities to develop knowledge and skills in this beautiful specialty.

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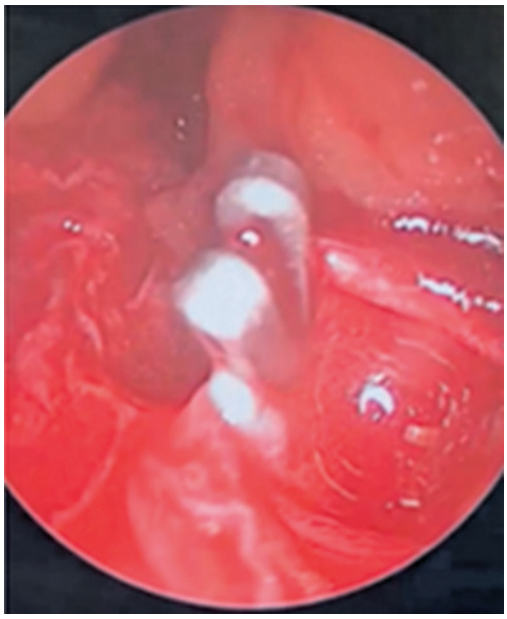

Figure 1. Vascular clips on the maxillary artery (left lateral view)

006

Bilateral parathyroid adenoma with retropharyngeal localization: a case report

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ABSTRACT

Introduction: Bilateral parathyroid adenomas are a rare cause of primary hyperparathyroidism, accounting for approximately 2-5% of cases.[1,2] The condition is characterized by the presence of two adenomas, which can lead to elevated levels of parathyroid hormone (PTH) and subsequent hypercalcemia.[3] The diagnosis and management of bilateral adenomas are complex, particularly when one of the adenomas is located in an ectopic position such as the retropharyngeal space.[4]

Case report: In this report, we will present the case of a 49-year-old Caucasian woman whose comorbidities are obesity, dyslipidemia, and hypertension. She began follow-up with an endocrinologist due to obesity, discovering alterations in calcium levels at 12mg/dl and PTH at 223pg/ml. Additionally, investigative exams revealed osteopenia on bone densitometry. The patient complained of fatigue and dysphagia for solids. Parathyroid scintigraphy was performed in addition to the investigative exams, showing a suspected parathyroid adenoma in the upper pole of the left thyroid lobe. The patient was referred to a head and neck surgeon, who requested a neck computed tomography scan. An expansive lesion occupying the left retropharyngeal space measuring 3.3 x 2.2 x 0.9 cm was observed (Figure 1), and near the right thyroid lobe, an image measuring 2 x 0.7 x 0.6 cm (Figure 2) with suspicion of parathyroid adenoma. The patient underwent open surgery on 07/25/2023 (Figure 3 and 4), presenting on the first postoperative day with calcium levels of 8.4mg/dl and PTH of 223pg/ml, requiring calcium replacement in the first weeks until PTH and calcium adjustment.

Discussion: Patients with bilateral parathyroid adenomas often present with symptoms of hypercalcemia, including fatigue, muscle weakness, nephrolithiasis, and neuropsychiatric disturbances.[5] The diagnosis typically involves biochemical tests showing elevated serum calcium and PTH levels.[6] Imaging studies, such as ultrasound, Sestamibi scans, and 4D-CT, are crucial for localizing the adenomas.[7] The retropharyngeal space is an uncommon location for parathyroid adenomas, making preoperative localization challenging.[8] Surgical excision remains the definitive treatment for parathyroid adenomas.[9] Bilateral exploration is often necessary to identify and remove both adenomas.[10] The retropharyngeal adenoma poses additional challenges due to its deep location and proximity to vital structures.[11] Minimally invasive techniques, including video-assisted and robotic approaches, have been employed to access ectopic adenomas in the retropharyngeal space.[12]

Postoperative monitoring of calcium and PTH levels is essential to ensure complete removal of the adenomas and to detect any recurrence.[13] Patients typically experience a significant improvement in symptoms following successful surgery.[14] Long-term follow-up is recommended to monitor for potential recurrence or the development of additional adenomas.[15]

Conclusion: Bilateral parathyroid adenomas, especially with one located in the retropharyngeal space, present unique diagnostic and therapeutic challenges. Advances in imaging and minimally invasive surgical techniques have improved the management and outcomes for these patients. Continued research and case studies are essential to further refine the approach to this complex condition.

Keywords: Parathyroid neoplasms; Hyperparathyroidism, primary

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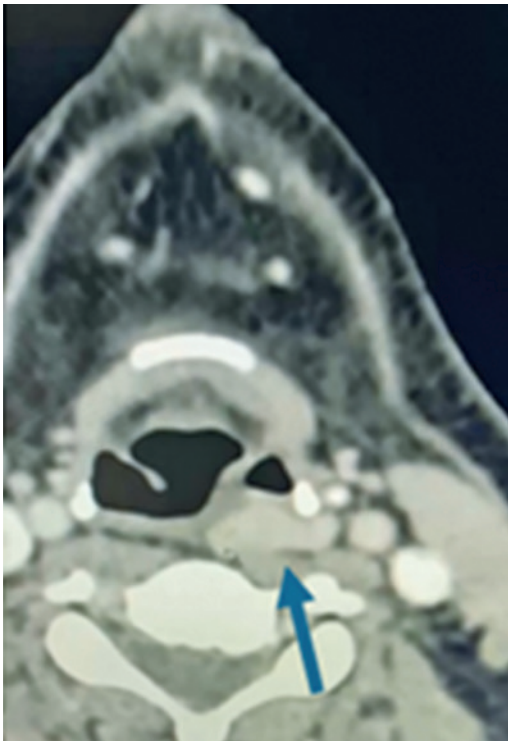

Figure 1. Left adenoma (arrow poiting)

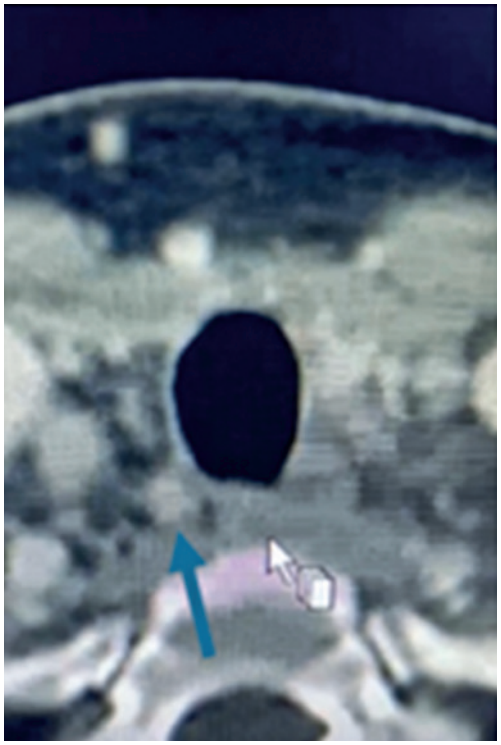

Figure 2. Right adenoma (arrow poiting)

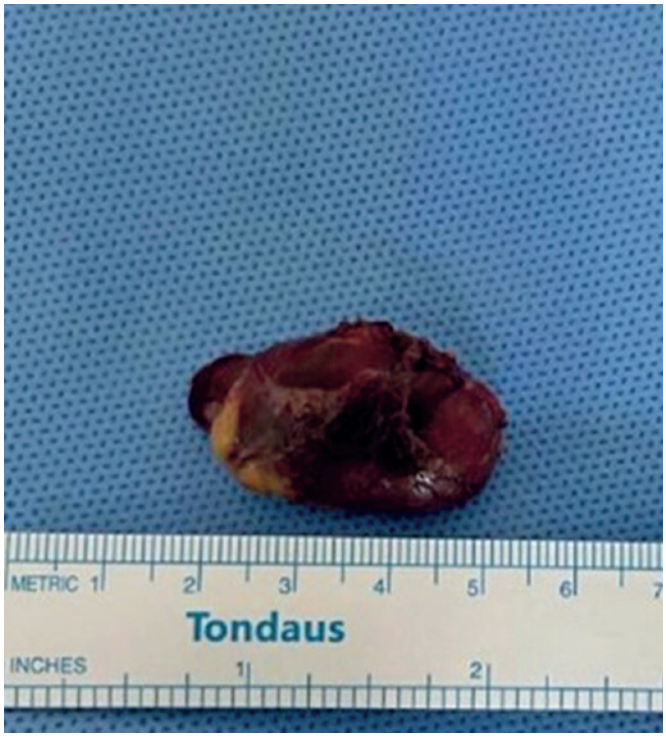

Figure 3. Left adenoma

Figure 4. Right adenoma

Presentation Abstracts

CONTENTS

007

Diagnostic challenges in Ewing sarcoma: a case report of right malar tumor in a 31-year-old patient

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ABSTRACT

Introduction: Ewing sarcoma is a rare, highly aggressive malignant bone tumor that, when treated only with local control measures, has an extremely high mortality rate. The introduction of adjuvant chemotherapy in the 1970s significantly improved the prognosis for these patients. Studies show that the combination of VAC (cyclophosphamide, doxorubicin, and vincristine) with ifosfamide and etoposide is superior to the VAC chemotherapy regimen alone, resulting in better event-free survival (EFS) and overall survival (OS) in patients with localized disease.

Objective: To report a rare case of Ewing sarcoma in the right malar region in an adult patient, highlighting the diagnostic challenges and the therapeutic management adopted.

Methods: This is a retrospective descriptive study, reporting the symptoms, diagnosis, and treatment of a 31-year-old male patient who presented with a rapidly progressing tumor in the right malar region, accompanied by intense pain.

Results: Initial evaluation included a detailed physical examination and imaging studies, such as computed tomography (CT) and magnetic resonance imaging (MRI), which were inconclusive for a definitive diagnosis. Subsequently, a biopsy of the lesion was performed, and the histopathological result indicated a poorly differentiated malignant neoplasm, without specific characteristics that could guide a definitive diagnosis. Immunohistochemistry revealed positivity for CD99, confirming the diagnosis of Ewing sarcoma. Treatment was initiated with a cycle of VAC chemotherapy (cyclophosphamide, doxorubicin, and vincristine) alternating with ifosfamide and etoposide. After the first VAC cycle, the patient showed a partial response, with a significant reduction in tumor volume and partial pain relief. However, the final treatment outcome is still undetermined.

Conclusion: The presented case highlights the diagnostic complexity and therapeutic management of Ewing sarcoma in adults, a rare and rapidly progressing condition. The integration of advanced diagnostic methods, such as immunohistochemistry, was essential for establishing the correct diagnosis. This case report emphasizes the importance of a multidisciplinary approach in the management of rare and aggressive neoplasms, such as Ewing sarcoma, and contributes to the medical literature with a relevant clinical experience.

Keywords: Ewing sarcoma; Zygoma

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Presentation Abstracts

CONTENTS

008

Lymph node involvement pattern in squamous cell carcinoma of oropharynx submitted to transoral robotic surgery

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ABSTRACT

Introduction: Cervical metastasis is the single worst survival factor for various head and neck tumors and the inadequate management of cervical lymph nodes can worse oncological results.(1) Elective neck dissection has been largely studied to define their adequate indications for each type and origin of tumor in order to avoid morbidity. The study of lymphangiogenesis of the tumors of the oropharynx correlating the macroscopic, radiological, histopathological and molecular factors are used to establish the risk factors of cervical metastasis.(2,3) The transoral robotic surgery has led to access of the oropharynx with less morbidity and scars, maintaining the cervical access only to the cases with indication of neck dissection.

Objective: Analyze the factors related to lymph node metastasis in neck chains and evaluate the relation between site of origin, stage and the most compromised lymph node levels. Establish the best therapeutic plan and personalize the profilatic neck dissection for patients submit of assisted robotic surgery.

Methods: Analysis of medical records, surgical report and histopathological reports of 156 patients who underwent transoral robotic oropharyngectomy for the treatment of squamous cell carcinoma between 2012 and 2020.

Results: In squamous cell carcinoma of the oropharynx the metastatic lymph nodes occur mainly in levels II and III of the neck. The incidence of level IIa metastasis in this study was 39% (n=61) and III was 19,8% (n=31). Level IIB was compromised in 6,4% of cases and mainly associated with disease in level IIA. The pathological reports demonstrated a low level of compromise in levels IA (1.2%), IB (3.8%) and submandibular gland (1.9%). Only 11 (7%) patients presented with cervical recurrence in 5 year follow-up. The lymph node disease was found ipsilateral in most of the cases, and bilateral involvement in 7 patients (4.4%), of which 5 had the primary site in the base of tongue.

Conclusion: The low level of compromise of level I and V demonstrated that their elective dissection did not provide benefit, considering the morbidity of manipulation of marginal mandibular nerve, spinal accessory nerve and post-operative pain. The understanding of the lymphatic dissemination pathways of oropharyngeal cancer associated with the main etiopathological factors of the disease, may indicate the best surgical management of the neck.

Keywords: Oropharynx cancer; Neck dissection; Robotics

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Presentation Abstracts

CONTENTS

009

Atypical fibroxanthoma: case report and literature review

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ABSTRACT

Introduction: Atypical fibroxanthoma is a rare type of skin neoplasm. It usually presents in elderly patients, in areas highly exposed to the sun, such as the head and neck region. It appears as a single, ulcerate lesion that can bleed and is difficultly differentiated from other tumors without histological analysis. Treatment is necessary surgical.

Objective: Report a clinical case of a patient with a challenging diagnostic injury. **Case report**: EBS, 70 years old, male, with history of the appearance of a protuberant, violaceous lesion in the front region for 8 months, with the appearance of a hematoma. The injury showed rapid and progressive growth, with the emergence of ulcerated and bleeding areas. Patient without comorbidities, with a history of drinking and smoking (30 pack years). He was admitted to the emergency room of *Hospitalar Heliópolis* with anemia (hb 8 mg/dl). Nuclear magnetic resonance two months ago showed an expansive infiltrative lesion front to the left with a lobulate contour and partially defined limits without destruction of the external bone table, extending to 3.8x2.9x1.7cm and biopsy with diagnosis of mesenchimal neoplasm malignant, suspected cutaneous angiossarcoma. On clinical examination, a friable infiltrative ulcer lesion in the left front region of about 12 he was hospitalized due to bleeding from the lesion with hemodynamic repercussion, requiring blood transfusion and hemostatic radiotherapy (6 sessions of 600 cGy, in 3 weeks) with regression of the lesion to 8.5x6.5cm. Following, the injury was submitted to surgical resection with reconstruction with the converse flap and subsequent skin graft from the inguinal region to the cruined region. After anatomopathological analysis, the lesion was compatible with atypical fibroxanthoma with positive immunohistochemistry for ki67 and vimentin. Currently, he continues in outpatient follow-up with good evolution. Retails and grafts with good looks.

Conclusion: atypical fibroxanthoma is a rare lesion with a possible poor prognosis if not approached surgically, its histopathological diagnosis is essential for the exclusion of other types of tumors and adequate treatment. In the case report presented, it was possible to resect the lesion with safe margins, providing a better quality of life for the patient.

Keywords: Atypical fibroxanthoma; Fibroxanthoma; Immunohistochemistry

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Presentation Abstracts

CONTENTS

010

Microsurgery reconstruction in head and neck training and early learning curve without preceptorship

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ABSTRACT

Background: Microsurgery reconstruction in head and neck has proven itself to be a milestone in the treatment of patients with malignant tumors of that region, allowing more aggressive ablative surgeries without compromising quality of life.(1) However, in Brazil, there are still very few learning centers, making it very difficult to the young head and neck surgeon to learn how to better manage more complex cases.

Objective: This study aims to show the initial learning curve and how the microsurgery technique can be learned with a lot of dedication and immersions courses for those not able to enter a fellowship program.(2,3)

Methods: This is a retrospective review of 52 patients operated by the same team, in different hospitals, from May 2020 to July 2024. Only head and neck diseases were included and there were both benign and malignant diagnoses. The vast majority of the cases were reconstructed at the same time of the ablative surgery in a two team approach. All patients were followed by the main surgeons and the viability of the flaps were assessed by clinical exam and Doppler twice a day.

Results After the first 20 cases the learning curve improved significantly and by better understanding the main reasons for a flap failure, we begun to anticipate the problems and resolve the critical points (as vessel kinking, mismatch, good flow at the recipient vessel, etc) during the per operative time. Therefore, from the 20th case on, we saw a very low rate of flap loss and better functional and esthetic outcome providing us the confidence to perform more complex attempts of reconstruction while still practicing in "homemade models", doing extensive research into books, guidelines and articles and discussing some more difficult cases with a small network of more experienced surgeons, even without ever being part of a full fellowship program.

Conclusion: The microsurgery reconstruction and free flaps technique are crucial resources in treatment of head and neck diseases. Although very demanding, with dedication, it's possible to properly learn and perform complex surgical reconstruction by attending immersion courses and practicing in simple models like chicken, tangerine or rubber gloves when and where other resources are scarce.

Keywords: Microsurgery; Head and neck

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Presentation Abstracts

011

Scalp angiosarcoma - report and literature review

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ABSTRACT

Introduction: Angiosarcoma is a type of soft tissue sarcoma, originating in vascular or lymphatic endothelial cells. It represents approximately 2% of all soft tissue sarcomas.(1) The most common form of angiosarcoma is manifest, typically affecting the head and neck predominantly on the scalp of elderly Caucasian men. It is associated with high recurrence rates and a poor prognosis despite treatment.(2)

Case report: Female patient, 67 years old, reported that 4 months ago she suffered a tumoral lesion on her scalp with progressive growth. A biopsy and histopathological examination were performed, which showed a neoplastic lesion compromising the dermis, with the formation of anastomosed vascular channels required by red blood cells. Dissociation of collagen fibers and marked atypia of endothelial cells were noted, some elongated or pleomorphic, with hyperchromatic nuclei, others epithelioid, with rounded and voluminous nuclei. According to the clinical, histopathological and immunohistochemical examination, we concluded that it was a scalp angiosarcoma. She was referred for surgical treatment; with wide resection and free exercise in the operated area. Presented free margins on pathological anatomy.

Results: Surgical resection with wide margins is the treatment of choice, generally associated with radiotherapy and/or chemotherapy with taxanes, ifosfamides or anthracyclines.(3)

Conclusion: Despite this, the prognosis remains poor with a survival rate of less than 40% at 5 years. Tumors smaller than 5 cm are associated with a better prognosis, therefore it is essential that the dermatologist is familiar with the clinical appearance of this tumor for early diagnosis and effective treatment.(4)

Keywords: Angiosarcoma; Head and neck neoplasms; Scalp

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Presentation Abstracts

CONTENTS

012

Malt lymphoma in parotid gland associated with Sjogren's syndrome

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ABSTRACT

Introduction: The aim of this article is to present a case report of mucosa-associated lymphoid tissue lymphoma (MALT) associated with Sjögren's Syndrome (SS).(1) Mucosa-associated lymphoid tissue lymphoma is a subtype of non-Hodgkin lymphoma, often affecting the parotid glands in SS. Frequently located in mucosal or non-mucosal extra-nodal sites, MALT lymphoma is an indolent disease.(2)

Case report: A 63-year-old woman reported dry mouth perceived for 2 years ago, hoarseness, dryness of the eyes and vaginal mucosa, tiredness and body pain. She also complained of a nodular mass near her ear, near to anterior lobe of the left parotid gland. Parotid ultrasonography and MRI, minor salivary gland biopsy, serological tests and ophthalmological evaluation were obtained.

Results: After two inconclusive ultrasound guided needle biopsies, the lesion was removed by partial parotidectomy.

]Immunohistochemical analysis showed B cell MALT lymphoma in the parotid gland, associated to SS.(3) The patient was referred to a Hematology Oncologic Center for evaluation and follow-up was established every 6 months.

Conclusion: Sjögren's Syndrome-associated MALT lymphoma still presents some challenges for dental surgeons regarding its diagnosis and treatment, so this report highlights the importance of clarifying any diagnostic doubts in salivary gland nodules in SS patients through surgical removal and anatomopathological analysis.(4)

Keywords: Parotid gland; Lymphoma; Sjogren's syndrome

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013

Case report: use of charcoal to guide TORS resection in a patient with a metastatic retropharyngeal papillary thyroid cancer lymph node

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ABSTRACT

Introduction: The retropharyngeal space is delimited by the superior constrictor muscles anteriorly, the prevertebral fascia posteriorly, by the carotid sheath laterally, the base of the skull superiorly and by the greater horn of the hyoid inferiorly, where fat and lymph nodes are contained.(1) Despite the excellent prognosis of patients with papillary thyroid carcinoma (PTC), around 40% have cervical metastases, with the central, lateral and mediastinal compartments respectively being the most affected.(2) Metastases from PTC to retropharyngeal lymph nodes are rare, affecting around 2-3% of patients and are associated with a poor prognosis.(3) Treatment of these metastases is preferably surgical, despite their unfavorable location.(4) Transcervical surgery is particularly morbid considering the indolent nature of most thyroid cancers and transoral robotic surgery has proven to be an excellent therapeutic option for this group of patients.(5) In cases where the lymph nodes are small, impalpable and invisible, finding a lymph node in the retropharyngeal space can be challenging due to its proximity to the internal carotid artery, and some strategies to help with this localization can increase the safety of the procedure in this group of patients.

Objective: To report a case using 3D reconstruction imaging and videos of transoral robotic surgery in which charcoal was used to mark the retropharyngeal lymph node before transoral robotic resection in a patient with suspected metastatic papillary thyroid carcinoma.
Methods: Using interventional radiology, a 0.5mL solution (activated charcoal 40mg/mL + 5mL lipiodol®) was injected via the right retro auricular route into the retropharyngeal lymph node, 12 hours before robotic transoral resection of this lymph node with Da Vinci Si system.

Case report: A 54-year-old patient underwent total thyroidectomy in May 2022 at another institution. She presented with classic, multifocal, bilateral papillary carcinoma, the largest nodule measuring 1.3cm in the right lobe with extrathyroidal extension, vascular and lymphatic invasion and compromised margins. Staging pT1bNx; Intermediate risk of recurrence. She was referred to our institution a year later with cervical structural disease in the central and lateral neck on the right side. Fine needle aspiration confirmed the cytopathological diagnosis of papillary carcinoma in the lateral compartment and computed tomography showed a right-sided retropharyngeal lymph node. The retropharyngeal lymph node was marked with charcoal the day before to better visualize it during surgery. The patient underwent transoral robotic surgery of the right-sided retropharyngeal lymph node followed by bilateral central neck dissection and right selective neck dissection levels II, III, IV and V. The charcoal-labelled lymph node was easily found and resected. The histopathological report confirmed metastatic disease in the retropharyngeal lymph node measuring 1.5cm, as well as 19 positive lymph nodes out of 67 examined, the

largest of which was over 3cm and more than 3 lymph nodes with extranodal extension. 45 days after surgery the patient was taking 150mcg of levothyroxine, with a TSH of 0.01; T4L 3.23; Tg 2.63 and Anti-Tg 5 with no evidence of clinical disease and waiting to undergo radioiodine therapy.

Conclusion: The proximity to the internal carotid artery and the difficulty in localizing a retropharyngeal lymph node can make robotic transoral resections of these lymph nodes challenging, especially in small, non-visible and non-palpable lymph nodes. To better localize these lymph nodes, 3D reconstructions and charcoal marking, can help to localize these lymph nodes, making surgery faster and safer.

Keywords: TORS; Retropharyngeal; Charcoal; Thyroid

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Presentation Abstracts

014

Alternative strategy in diagnosis of recurrence of laryngeal carcinoma after curative radiotherapy and chemotherapy - a case report

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ABSTRACT

Introduction: According to publication by the Brazilian Ministry of Health in 2022, malignant neoplasms of larynx represent around 25% of head and neck tumors.(1) In 2022, INCA (National Cancer Institute) estimated 7790 new cases of malignant neoplasm of larynx in Brazil and 4562 deaths caused by this condition in 2021.(2) Among laryngeal tumors, there is laryngeal squamous cell carcinoma, originated from dysplasia of the squamous cells of the lining epithelium. One treatment option for laryngeal carcinoma is curative radiotherapy and chemotherapy without surgical intervention, especially in cases with total laryngectomy indication.(3) However, in these cases, a recurrence rate of 25 to 50% is described.(4) Therefore, follow-up after non-surgical treatment is necessary to reevaluate the region and segment of possible recurrence. This segment is performed by clinical, endoscopic and imaging examination. Nevertheless, there are difficulties regarding this type of segment, due to the morphological changes caused by the radiation treatment, such as intense mucosal edema.(5) According to a 2020 literature review, the best follow-up for making this diagnosis in stages T2-T4 would be PET/CT (positron emission tomography) 3 months after initial treatment with subsequent direct laryngoscopy with biopsy of the lesion for confirmation, if any injury was found. If no lesion is confirmed, periodic repetition of the imaging method and clinical examinations would be indicated. However, in cases of suspected recurrence there is always difficulty in diagnosis, which could lead to false negatives. This difficulty, despite being important, is little studied and due to the small number of studies, the review cannot be conclusive regarding which approach would be best in monitoring these cases.(6) The objective of this case report is to demonstrate an alternative strategy for diagnosing recurrence/persistence of laryngeal carcinoma.

Objective: Describe a diagnostic strategy for recurrence of laryngeal squamous cell carcinoma after conservative treatment (curative chemotherapy and radiotherapy).

Methods: This is a case of recurrence of squamous cell carcinoma of the larynx after curative radiotherapy and description of diagnostic methods used to diagnose and evaluate recurrence in this case. We will not identify the patient to respect ethical precepts. The patient agreed to the presentation through ICF.

Case report: A 64-year-old patient, diagnosed in another service with laryngeal squamous cell carcinoma (Transglottic) T4N0M0. The patient underwent radiotherapy and chemotherapy in other services and completed treatment in January 2024. In March of the same year the patient presented pain and respiratory difficulty, having undergone tracheostomy and biopsy by suspension laryngoscopy in that month. The initial result was absence of tumor. In April 2024, the patient underwent a new suspension laryngoscopy, whose pathological anatomy also did not demonstrate the presence of tumor. In May 2024, the patient sought our service after undergoing fibroscopy associated with radio intervention (computed tomography, Figure 1) with biopsy (different strategy). With this procedure, the diagnosis of recurrent squamous cell carcinoma was confirmed and the patient was referred for salvage laryngectomy in June 2024.

Discussion: In the case presented, the patient underwent examination and procedure under general anesthesia and still had no diagnosis of recurrence (or persistence). This expresses the difficulties in the recurrence monitoring segment. To solve this problem, the authors used an already established strategy, although it had not been described in the larynx approach.

Conclusion: The strategy of laryngoscopy associated with radio intervention was effective in managing the case presented and can constitute another tool in the management cases that present difficulties in diagnosing recurrence or persistence of laryngeal carcinoma.

Keywords: Laryngeal Squamous Cell Carcinoma, Recurrences, Conservative Therapy, Diagnoses, Computed X-Ray Tomography

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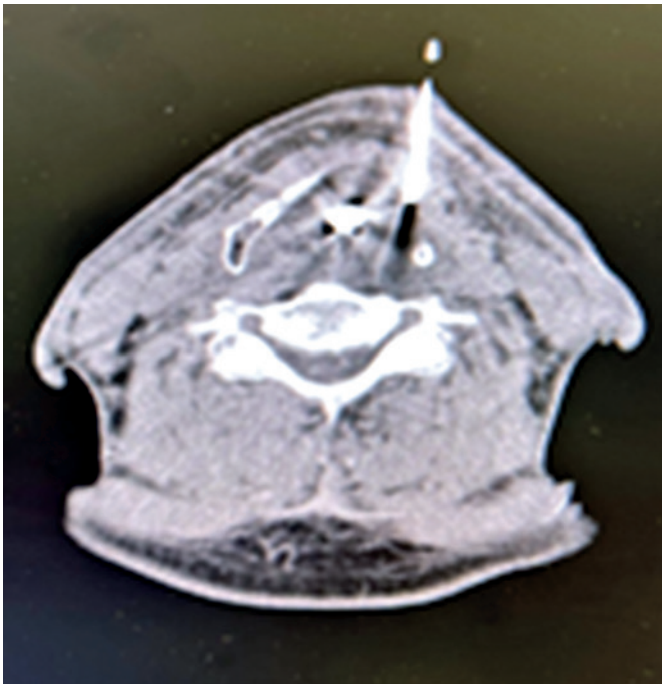

Figure 1. Core biopsy with CT image of the larynx tumor performed after the laryngoscopy for the localization of the tumor

015

Demographic analysis of patients at the head and neck surgery outpatient clinic at Hospital Santa Casa in São Paulo

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ABSTRACT

Introduction: Head and neck cancer is a highly relevant public health issue due to its high incidence and mortality rates. According to the National Cancer Institute (INCA) estimates for 2023, Brazil sees 15,100 cases of oral cavity cancer and 7,790 cases of laryngeal cancer, making these the fifth most frequent cancers in the country.(1) Among men, oral cavity cancer is the fifth most common, and laryngeal cancer is the eighth.(1) Notably, around 75% of these cases are diagnosed at advanced stages, complicating treatment and reducing survival rates. Early-stage diagnosis offers high cure rates, up to 80% for mouth cancer,(2) and disease-specific survival rates of over 90% and 80% for laryngeal cancer at stages I and II, respectively.(3)

Objective: Understanding the demographic profile of patients with head and neck cancer is crucial for formulating effectiv e health policies, resource planning, and developing prevention and treatment strategies.

Methods: This prospective study was conducted with data from 1,325 patients diagnosed with Head and Neck Squamous Cell Carcinoma (HNSCC). Data were collected at the outpatient clinic of a public tertiary hospital in São Paulo-SP, from an initial sample of 3,311 patients. The data collection included demographic information, medical history, lifestyle habits, tumor staging at diagnosis, and treatments administered.

Results: Analysis of these data revealed that the mean age of the patients was 62.44 years (standard deviation of 12.77). The gender distribution was predominantly male (963, 73.6%), with females representing 26.1% (342). Regarding race, 49.9% (639) were white, 36.2% (464) mixed-race, 13.1% (168) black, 0.6% (8) yellow, and 0.2% (2) other. The majority of patients (63.4%) had a monthly family income of up to 2 minimum wages, representing a low income for national reality. A family history of cancer was positive in 33.4% of cases. Concerning risk factors, 44.2% were alcohol users, and 75.4% were smokers, with an average smoking load of 46.98 pack-years (standard deviation of 32.81). The most common symptoms were hoarseness (19.9%), mouth sore (20.2%), and neck lump (16.9%). The mean duration of symptoms was 13.68 months (standard deviation of 22.13). Clinical staging revealed that 51.7% of patients were in stage IV, 20.7% in stage III, 16.3% in stage II, and 11.0% in stage I. The main tumor sites were the larynx (25.5%), oropharynx (17.6%), and mouth (16.6%). Among patients who did not require further diagnostic workup, 47.39% underwent surgical treatment. Among those who received non-surgical treatment, 86.8% were treated with combined

radiotherapy and chemotherapy, 5.4% with exclusive radiotherapy, and 7.8% with other treatments.

Conclusion: The results of this study indicate a considerable delay in the diagnosis of patients with malignant head and neck neoplasms. This late-stage presentation significantly reduces the likelihood of successful treatment outcomes and contributes to a poorer prognosis for the patients. The advanced stage at diagnosis also implies that the disease has had more time to progress, making it more difficult to treat effectively and requiring more intensive and costly therapeutic interventions. These statistics highlight the importance of early detection in improving patient outcomes and reducing the burden on healthcare systems. Considering these findings, it is evident that public health strategies must prioritize prevention, early detection, and risk factor reduction to combat head and neck cancer more effectively.

Keywords: Head and neck squamous cell carcinoma; Epidemiology; Delayed diagnosis; Risk fctors; Public health

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Presentation Abstracts

016

Diode laser surgery for early-stage oral and oropharyngeal cancer - a comparative study with conventional electrosurgery

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ABSTRACT

Introduction: Any surgical resection of the oral cavity and pharynx can lead to serious impairments affecting swallowing, chewing, breathing, and speech. Early-stage tumors of the oral cavity and oropharynx are generally accessed via the transoral approach.(1) Resections using an electronic scalpel can create complex defects, with the exposed area causing intense pain and bleeding in the postoperative period. Consequently, reconstruction with flaps (local or free flaps) is usually indicated and is important for achieving better functional outcomes.(2) The Diode LASER is not a new tool for the treatment of Head and Neck (H&N) tumors, and its use in the treatment of early glottic cancer is well established,(3) but the CO2 LASER has been more widely adopted worldwide.(4)

Objective: Therefore, this study aims to evaluate hospital stay duration and postoperative complications in the transoral surgical resection of early-stage malignant neoplasms of the oral cavity and oropharynx, comparing Diode LASER surgery with conventional electrosurgical resection.(5)

Methods: This is a retrospective cohort study that includes all patients with early-stage malignant neoplasms of the oral cavity and oropharynx treated with transoral surgical resection using a Diode LASER compared to patients who underwent conventional electrosurgical resection between August 2019 and August 2022 at a Head and Neck Cancer Center. A total of 21 patients were initially selected using inclusion criteria. Two patients were excluded because they had T3 and T4 tumors after pathological staging (AJCC 8th ed.). Finally, this study included 19 patients: 10 underwent transoral resection with Diode LASER (DLG) and 9 underwent electrosurgical resection (ESG). The outcomes evaluated were hospital stay duration, postoperative complications, enteral feeding tube, tracheostomy, and oncological outcomes (recurrence rate and margins).

Results: The average hospital stay duration was shorter in the Diode LASER group (3.2 days *versus* 4.8 days / p=0.01). Postoperative complication rates were similar in both groups. None of the patients presented local or regional recurrence during follow-up. The average follow-up duration was 23 months.

Conclusion: Diode LASER surgery is associated with reduced hospital stay duration for early-stage carcinomas of the oral cavity and oropharynx.

Keywords: Oral neoplasms; Oropharyngeal neoplasms; Diode lasers; Electrosurgery; Postoperative complications

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Presentation Abstracts

CONTENTS

017

Analysis of tertiary lymphoid structures as a biomarker in head and neck squamous cell carcinoma samples

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ABSTRACT

Introduction: Head and neck squamous cell carcinoma (HNSCC) is an epithelial tumor that has a high prevalence and a high potential for malignancy.(1) Therefore, the study of biomarkers that assist in diagnosis and can direct therapeutic management are fundamental. Tertiary lymphoid structures (TLS) are organized aggregates of immune cells that form in chronic inflammatory tissues, including tumors.(2) B lymphocytes are key components of TLS and play crucial roles in the antitumor immune response.(3) Therefore, the study of the relationship between HNSCC and the role played by TLS in combating neoplastic cells is essential in predicting the response and treatment of this tumor.

Objective: Correlate the presence of TLS (through CD20 marking on B lymphocytes) and the degree of malignancy of tumors according to the TNM classification.

Methods: Twelve HNSCC samples were collected during surgical resection, with the approval of the Ethics and Research Committee of FOAr/UNESP in collaboration with the *Faculdade de Medicina de São José do Rio Preto* (FAMERP (nº 5160996)), in the period of 12/05/2023 to 25/05/2024. The samples were processed, embedded in paraffin and cut using a microtome. The resulting slides were stained with hematoxylin and eosin (H/E), and labeled with the CD20 antibody using the immunohistochemistry technique, and subsequently analyzed and quantified, using a score. Anatomopathological information such as tumor size, presence of lymph node metastases and staging were obtained from patient records at the Otorhinolaryngology and Head and Neck Surgery Service of the University Hospital of the *Faculdade de Medicina de São José do Rio Preto*. Samples were grouped into T1/T2 and T3/T4 and N0 and N+. Statistical analysis included the Shapiro-Wilk *test* for normality, and Mann-Whitney *test* for find statistically significant differences between groups. The correlation between the quantification of CD20 and tumor staging (T and N) in the samples was assessed using Spearman's correlation. Data were analyzed using the GraphPad Prism 8.0 software, considering $p \leq 0.05$ as statistically significant.

Results: From the Mann Whitney *test*, no statistically significant difference was found in the expression of

CD20 between groups T1/T2 and T3/T4 (p=0.6465) and N0 and N+ (p=0.9120). There is a negative correlation in CD20 expression between the T1/T2 and T3/T4 group (R=-0.5590 p=0.600) and N0 and N+ group (R=-0.500 p=0.999) although not significant. These results of correlation agree with literature data, highlighting the immunoprotective role of B lymphocytes in combating cancer progression.

Conclusion: The preliminary data obtained indicate that patients with HNSCC may have a favorable antitumor immune response due to the presence of TLS. However, additional studies that encompass other biomarkers are necessary to consolidate this hypothesis and offer a more complete view of TLS and response to HNSCC treatment.

Keywords: Head and neck squamous cell carcinoma; Tertiary lymphoid structures; B-lymphocytes

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Presentation Abstracts

CONTENTS

018

Pre-clinical training, technical adjustment and human case experience of transoral robotic surgery using Versius System

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ABSTRACT

Introduction: Transoral robotic surgery (TORS) has emerged as a promising option for the treatment of head and neck tumors, as it allows the use of articulated instruments and high-quality 3D vision.(1) The flagship of TORS is the resection of squamous cell carcinoma of the tonsil and base of the tongue, which had the option of open surgery with a significant functional and aesthetic impact and radiotherapy with feared late effects. However, Head and Neck Robotic Surgery also had expanded indications for the hypopharynx, parapharyngeal space, larynx, thyroid and cervical surgeries.(2) The progression of robotic surgery in the head and neck followed the development of the Da Vinci's platform. The Versius Robotic System developed by CMR Surgical (Cambridge, United Kingdom) stands out for its uncomplicated docking system, facilitated by individual mobile units, called bedside units. The robot arms are equipped with 5mm clamps with 720º rotation capacity. This robot requires the definition of a pivot point along the instrument in each arm, a process referred to as port training. Although this robot demonstrates comparable outcomes to other robots across various specialties, in Head and Neck Surgery its use is very incipient. A preclinical study with cadavers reported the feasibility of performing TORS with Versius Robot and elucidated its limitations. The same group published the first human case series in 2024.(3)

Objective: Our study aims to develop the setup and applicability of the Versius Robotic System in Head and Neck Surgery with a mannequin training and to describe our experience in a human case.

Methods: A synthetic polymer mannequin mimicking human tissues and anatomy was used to define the robot setup for TORS. A human patient was selected based on the inclusion criteria, and a standardized protocol for robotic techniques was developed. The surgical procedure was conducted in accordance with ethical guidelines.

Results: A specialized prototype was created to simulates the human head, encompassing both the oral cavity and pharynx. The Davis-Boyle mouth Gag was employed, providing excellent exposure. Various configurations of the robotic system were experimented with until an optimal setup was determined. Measurements were recorded and replicated in the first case. A 37-year-old female patient was indicated for bilateral tonsillectomy due to recurrent episodes of tonsillitis. This patient was selected for the first case due the surgery could be easily converted to an open operation without a robot if necessary, ensuring patient safety. We used the right and left arms of the robot docked caudally to the patient's oral cavity. We used the "C" formation on both arms. The camera was docked above the headboard with the arm in a "Z" formation (Figure 1). The port training of the right and left arms was defined at virtual points 15cm from the labial commissure on each side. The camera port training was carried out 2cm from the central incisor. Bipolar Maryland was used on the ipsilateral side of the tonsil to be operated and on Monopolar scissors on the other arm. The Meryland performed inferior and medial traction of the tonsil crossing with the Monopolar scissors. With this strategy we were able to optimize space. We observed that setting the port training 5cm further compared to the configuration used by the English group offered better stability in the instruments. The main technical challenge encountered during the procedure is the clashes between surgical instruments and the camera due to space limitations. After crossing the right and left arm instruments, the surgery proceeded without collisions problems. Bilateral tonsillectomy was performed uneventfully. The patient remained hospitalized for one day and returned to work activities within 6 days, with no complications.

Conclusion: The specialized mannequin proved to be effective in the simulation, training proposal and set up standardization. Furthermore, the Versius robot was found to be safe and achieved excellent results during surgery. Despite being very promising, the Versius system is still in its developmental phase and requires larger-scale samples for a more comprehensive evaluation.

Keywords: Robotic surgical procedures; Surgical robotics; Robotics computer-assisted

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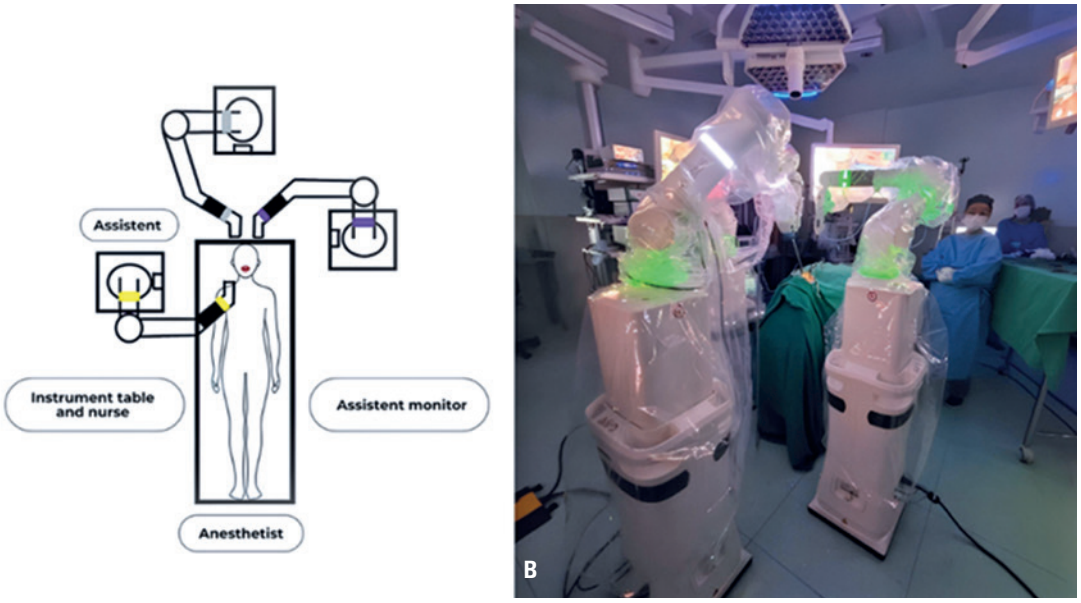

Figure 1. (A) Organizational layout of the operating room and positioning of the robot (B) Operating room arranged as described

Presentation Abstracts

CONTENTS

019

Management of retropharyngeal metastases of papilar thyroid cancer: a case series of transcervical and transoral robotic surgery

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ABSTRACT

Introduction: Well-differentiated thyroid cancer typically demonstrates favorable oncological outcomes, with surgery being the primary therapeutic modality. The main route of spread of this cancer is to the central or lateral cervical lymph nodes. Retropharyngeal lymphatic spread is considered rare. The most common presentation is elevated thyroglobulin levels or uptake on diagnostic whole-body scans in context of the recurrent disease. Management options for retropharyngeal metastasis include observation, radioactive iodine therapy, systemic therapy, external radiation, and surgery. Due to the known favorable response to surgical treatment of thyroid cancer, this is the preferred treatment in the majority of cases. The classical surgical approach to the retropharyngeal space is transcervical, used in 77.8% of reported cases.(1) While it provides adequate exposure, concerns exist regarding potential surgical complications related to this approach. In this context, with the development of Transoral Robotic Surgery (TORS), this approach has gained prominence, offering adequate access with reduced morbidity.(2) Despite some studies addressing the management of retropharyngeal metastases, the optimal surgical approach remains underexplored. This study aims to describe a series of cases of retropharyngeal metastasis from thyroid cancer operated on via cervical and transoral robotic approaches, and to discuss the surgical therapeutic options.

Methods: Consecutive patients who underwent surgical treatment for retropharyngeal metastases of papillary thyroid cancer by a head and neck surgery team from January 2018 to July 2024 were included. This study was approved by the ethics committees and all patients were in accordance. A descriptive analysis was performed, including clinical presentation, prior surgical history, operative characteristics, and postoperative outcomes.

Results: A retrospective review of 1315 thyroid cancer surgeries conducted by a Head and Neck Surgery team. Were identified four cases of retropharyngeal metastasis: two treated via transcervical surgery and two via TORS. The average patient age was 51.5±12.4 years, with 1 male and 3 female. All cases were classified as classical papillary thyroid carcinoma, with one being microcarcinoma and the others pT4. One patient had already undergone total laryngectomy concomitantly with resection of the primary thyroid tumor due to laryngeal invasion. In other patient, retropharyngeal

node dissection was performed during treatment with combined target therapy and after successful treatment of brain metastasis with surgery and radiosurgery. In our sample, all cases were recurrences with disease limited to the retropharyngeal space, diagnosed due to persistent high thyroglobulin levels. Furthermore, in all patients, a lateral node dissection had already been performed, corroborating the theory that prior neck dissection may alter lymphatic drainage patterns to retropharyngeal nodes. All patients were discharged the day after surgery and no postoperative complications were reported. Patients who underwent robotic surgery experienced, as expected, odynophagia due to pharyngeal healing in the first week but subsequently progressed without feeding difficulties. Herries et al. noted a 25% incidence of dysphagia as a complication in both robotic and cervical approaches, with unclear duration (temporary vs. permanent).[3] Additionally, in the same study a case of hypoglossal nerve injury was reported in the cervical approach. We had local recurrence in one case (25%) following the transcervical approach. The more aggressive behavior of the disease in this case was already known due to the primary tumor with laryngeal invasion. In the literature, local recurrence occurs in 11.4% of surgical cases.

Conclusion: Surgical treatment remains the primary modality of retropharyngeal metastasis, associated with low reported morbidity. When available, TORS offers potential advantages of being less invasive, associated with fewer complications, not leaving a visible scar, and maintaining favorable oncological outcomes. Patients who need concurrent lateral node dissection may benefit from a combined approach depending on the anatomical presentation of retropharyngeal metastasis.

Keywords: Retropharyngeal lymph node metastasis; Transoral robotic surgery; Papillary thyroid cancer

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Presentation Abstracts

CONTENTS

020

Ewing sarcoma of soft tissues in head and neck: case report

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ABSTRACT

Ewing sarcoma was characterized by James Ewing in 1921 as a perivascular endothelial tumor. It is believed to be originate from mesenchymal, myeloid, or primitive multipotent cells. It is a primarily bone tumor and it is rare in soft tissues.

In pediatrics, Ewing sarcoma is the second most frequent bone tumors. Ewing sarcoma in the head and neck represents about 1-4% of all cases; the main sites are mandible and skull. It has a higher prevalence in males, primarily in the second decade of life, with the age range between 7 to 14 years. Extraosseous Ewing sarcoma is very rare and is considered a neuroectodermal tumor of clear cells, which can affect deep subcutaneous tissue, muscles, and more rarely the skin. These are few cases described in the literature, in this case the prevalence is higher in females, at a ratio of 2:1, and more common in the second decade of life. The present case reports a 4-year-old female patient from Bolivia, with a tumor in the soft tissues of the left frontoparietal region, that progressed in 5 months. She was submitted to exclusive surgical treatment in Bolivia, and diagnosed with Ewing sarcoma. She developed a recurrence of the lesion when she came to Barretos Cancer´s Hospital. At this facility, the patient was submitted to images exams for clinical staging, and chemotherapy was defined as the initial treatment, followed by surgical resection and adjuvant chemotherapy, with it continues to date.

Keywords: Sarcoma, Ewing; Head and neck surgery: Neuroectodermal tumor

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021

Thyroid's angiosarcoma: a rare case report in Brazilian younger female

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ABSTRACT

Introduction: Angiosarcoma is a highly aggressive malignant neoplasm originating from the endothelial cells of blood or lymphatic vessels. These tumors can arise in any anatomical location, although they most commonly manifest in the head, neck, skin, and breast regions. Notable risk factors for angiosarcoma include exposure to radiation, chronic lymphedema, radiotherapy, certain chemical exposures, and immunosuppression.(1) Thyroid angiosarcoma (TAS) is an exceptionally rare subtype, accounting for less than 1% of all sarcomas. It is more frequently observed in alpine regions, potentially associated with iodine deficiency and long-standing endemic goiter. The incidence of TAS is higher in females (ratio 9:3), primarily affecting individuals aged between 50 and 80 years. The prognosis is generally poor, with a 5-year survival rate of 33.3%, due to rapid metastasis to the cervical lymph nodes, lungs, and bone marrow, and distant metastases to soft tissues, brain, and skin have also been reported.(2) Herein, we report a case of a 37-year-old female patient from Brazil diagnosed with TAS.

Case Report: A 37-year-old female patient with a history of hypothyroidism, managed with levothyroxine 50 mcg, presented with a palpable nodule in the right thyroid lobe. Ultrasound examination revealed a 2.6 cm solid, hypoechoic nodule in the right lobe. Cytology indicated a Bethesda V classification, suggesting medullary carcinoma. Preoperative evaluations showed elevated TSH levels (10.3 UI/ml) with normal carcinoembryonic antigen (CEA), calcitonin, total calcium, and urinary metanephrines. The patient underwent a right lobectomy with an intraoperative frozen biopsy, which confirmed malignancy. Consequently, a total thyroidectomy followed by a bilateral neck dissection at level VI was performed. The patient was discharged in good clinical condition with recommendations for continued clinical and endocrinological evaluation. Microscopic examination revealed a malignant spindle cell neoplasm with mild nuclear pleomorphism, mitotic activity, and focal follicular differentiation of 2,5cm in the right lobe, with focal extrathyroidal extension, absence of vascular invasion, free margins, and bilateral recurrent lymph node involvement pT2 pN1a staging. In the left lobe was evidenced a nodular colloid goiter. Immunohistochemical analysis showed strong and diffuse positivity for CD31 and ERG among endothelial cell markers, against negative HHV-8, S100 protein, CAMT1, cytokeratins, and clone D33 desmin. These findings confirmed the diagnosis of angiosarcoma. Staging examinations, including neck, chest, and abdominal tomography, and bone scintigraphy, showed normal results. The patient received local radiotherapy (56 Gy) and was monitored closely for 48 months, with no signs of recurrence, before being lost to follow-up.

Conclusion: This report presents a rare case of non-alpine TAS in a younger female patient. Cytologic diagnosis of TAS can be challenging due to cellular paucity, necrosis, and the rarity of the disease. Initial suspicion of medullary carcinoma led to further investigation, though results were inconclusive. A core biopsy might have been beneficial, but it is not typically part of the diagnostic protocol for thyroid tumors. The use of frozen biopsy was crucial in confirming malignancy, thus guiding the appropriate course

of total thyroidectomy and lymph node dissection. Angiosarcomas, rare malignant vascular tumors, often require immunohistochemistry for accurate differentiation from other sarcomas. Recent studies highlight the utility of the erythroblast transformation-specific related gene (ERG) marker in evaluating vascular malignancies, including angiosarcomas.[3] However, it is essential to recognize that ERG can stain a variety of benign and malignant neoplasms. Therefore, not all vascular lesions staining positive for ERG are angiosarcomas. With its sensitivity and strong correlation to CD31, ERG staining is highly effective for diagnosing angiosarcoma. In this case, ERG staining was instrumental in confirming the diagnosis of TAS.

Keywords: Angiosarcoma; Thyroid neoplasms

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022

Use of pectoralis major flap with preservation of the lateral thoracic artery in immediate facial reconstruction of extensive ulcerated parotid carcinoma

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ABSTRACT

Introduction: Parotid carcinoma, especially when extensive and ulcerated, presents significant challenges for surgical and reconstructive management. Knowledge of techniques for immediate facial reconstruction that are low-cost and accessible, such as the pectoralis major flap, is crucial in the Brazilian social context. This flap stands out for its low cost and effectiveness in resource-limited centers.(1)

Objective: A 24-year-old male patient, non-alcoholic, a pipe smoker for 11 years, presented with a large ulcerated mass in the right mandibular-cervical region (Figure 1A). No family history of cancer was referred, no personal history of other comorbidities and negative serologies for HIV and hepatitis was found. Computed tomography and biopsy confirmed an unspecified carcinoma of the right parotid gland. Clinical TNM staging was determined as T4aN2bM0. The surgical intervention included radical parotidectomy with preservation of the superior branches of the facial nerve, right cervical dissection, left cervical lymphadenectomy, and immediate cervicofacial reconstruction using the pectoralis major myocutaneous flap with preservation of the lateral thoracic artery.

Methods: The technique involved identifying and preserving the lateral thoracic artery during flap dissection. Preserving this artery ensured adequate blood supply to the distal portions of the flap, reducing the risk of necrosis and other complications. The flap was carefully dissected, maintaining the integrity of the lateral thoracic artery to provide additional vascularization to the flap (Figure 1B).

Results: The surgery was performed without intraoperative complications (Figure 1C). Postoperative care included antibiotic therapy, corticosteroids for venous congestion management, and prophylactic anticoagulation. The patient remained hemodynamically stable and was discharged on the fourth postoperative day with instructions for wound care and follow-up. After 15 days, the sutures were removed in the outpatient clinic, with no complaints and good wound healing progress (Figure 1D).

Conclusion: The pectoralis major flap is a myocutaneous flap primarily based on the preservation of the thoracoacromial artery. However, the additional preservation of the lateral thoracic artery yields better results when possible.(1) This case highlights the benefit of preserving the lateral thoracic artery improving blood supply, especially to the distal portions of the flap, directly impacting the healing and outcome of facial reconstruction in patients with extensive parotid

carcinoma. Good progress was also observed in flap flexibility and reach, reduction of complications, and faster and more effective patient recovery. The pectoralis major flap offers an effective alternative to immediate reconstruction with microsurgery, especially in cases where microsurgery may not be feasible due to time, resource, or clinical limitations.[2,3]

Keywords: Parotid gland neoplasms; Surgical flaps; Myocutaneous flap; Facial reconstruction; Head and neck neoplasms

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Figure 1. A) before resection; B) during the procedure, an extensive defect in the resection area was observed, and a flap was constructed; C) immediate postoperative; D) after 15 days of postoperative and removing stitches

023

Cribriform-morular thyroid carcinoma: case report and literature review

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ABSTRACT

Introduction: Case report of a young female patient with cribriform-morular variant of thyroid carcinoma diagnosed after partial thyroidectomy. Additionally, a brief review of the literature on this rare subtype of thyroid neoplasm often associated with familial adenomatous polyposis (FAP).

Case Report: A 23-year-old female patient of mixed race, born and residing in Barueri, São Paulo, Brazil. Referred from the primary care unit to our Head and Neck Surgery outpatient clinic at the, *Instituto do Câncer do Estado de São Paulo* on April 4, 2024. At that time, the patient reported the onset of a cervical nodule in the thyroid region 5 months prior, with rapid growth and sporadic dysphagia. She was otherwise healthy, without comorbidities or regular medication use, with no personal or family history of FAP, and reported occasional past smoking (quit 6 months ago). A thyroid ultrasound performed in November 2023 revealed a predominantly solid, hypoechoic nodule with regular margins, located in the mid/lower third of the right lobe, measuring 2.8 x 1.9 x 1.5cm (TI-RADS 4 classification), along with possible colloid cysts measuring up to 0.4cm. Estimated thyroid volume was 11.4cm^3 with no evidence of lymphadenopathy. In December 2023, fine-needle aspiration of the nodule in the right thyroid lobe yielded Bethesda V results. She underwent partial thyroidectomy (right thyroid lobe + isthmus) on April 30, 2024, with frozen section biopsy showing follicular lesion with extensive Hürthle cell changes and no atypia. She was discharged the day after surgery. On May 20, 2024, the final biopsy confirmed cribriform-morular thyroid carcinoma with the following characteristics: Unifocal, 2.8cm in size, up to 1 mitosis per 10 high-power fields, absent lymphatic and perineural invasion, present vascular invasion, no macroscopic or microscopic extrathyroidal extension, and clear surgical resection margins. Immunohistochemistry showed positivity for Beta-catenin, CDX-2, CD10, CD31, CD5, D2-40, KI-67, PAX-8, and TTF-1 markers. Pathology slides provided by the Pathology team at ICESP are shown in figure 1. The patient subsequently underwent completion thyroidectomy on July 10, 2024. She

experienced postoperative hematoma as a complication (1 hour after surgery), requiring immediate reoperation for hemostasis, with successful outcome and discharge 2 days later. Currently, the patient has not attended her postoperative follow-up appointment.

Discussion: Cribriform-morular thyroid carcinoma (CMTC) is a rare subtype of thyroid carcinoma characterized by cribriform (irregular glandular structures resembling sieves with small spaces between them) and morular (resembling colloid-like structures within tumor cells) patterns.[1] Epidemiology of CMTC is limited due to its rarity, but some reports in the medical literature indicate it represents less than 1% of all thyroid carcinomas and predominantly affects young women. It is usually associated with FAP,[2] although sporadic cases also occur. Surgical treatment is mandatory, with debate between lobectomy and total thyroidectomy, leaning towards the latter especially in cases associated with FAP.[2] Prognostically, CMTC is considered an indolent neoplasm with favorable outcomes, less frequently metastasizing to lymph nodes or distant sites compared to papillary thyroid carcinoma.[3] However, aggressive cases with distant metastases to lungs and brain have been reported.[4] Even in sporadic presentations of these variants, colonoscopy screening, genetic counseling, and family screening should be considered due to the potential for thyroid malignancy occurring many years before colonic manifestations.[3]

Conclusion: Although rare, accurate diagnosis of CMTC is crucial due to its malignant potential and association with FAP. However, further comprehensive studies are needed to better understand its clinical progression, treatment strategies, and prognosis.

Keywords: Cribriform-morular variant; Familial adenomatous polyposis; Papillary thyroid carcinoma; Ultrasound

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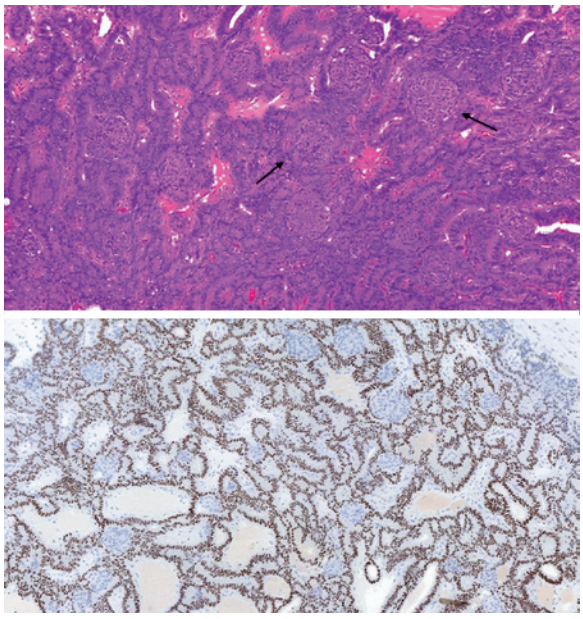

Figure 1. Upper part: tumor arranged in trabeculae with morular squamous structures (black arrows) (H&E, 8×); Lower part: cribriform and trabecular areas positive for thyroid transcription factor 1 (TTF1) (IHC, 10×)

024

Bilateral kinking of the extracranial internal carotid arteries: risk factors and surgical considerations

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ABSTRACT

Introduction: The asymptomatic bilateral kinking of the extracranial internal carotid artery is an uncommon and often overlooked condition in clinical practice. However, it has the potential to have significant consequences for cerebral blood flow and cervical surgical procedures, including transient ischemic attacks and strokes. It could also cause iatrogenic injuries during surgeries. Although the etiology of this anatomical anomaly is unknown, theories regarding both congenital and acquired factors have been described. It was also observed that the prevalence of kinking and coiling of the extracranial ICA exhibits a bimodal distribution, in both the younger and older population. This supports the hypothesis of a congenital anomaly that resolves with somatic growth and reappears or worsens in older age. The severe kinking can cause neurological symptoms and can evolve to cognitive implications, especially if it is bilateral. The surgical correction is justified in patients with symptoms of carotid artery syndrome and common carotid artery angulation. This case report describes an 82-year-old female patient diagnosed with T2N1 squamous cell carcinoma of the tongue, presented on PET-CT with bilateral lymph node involvement, but no other symptoms were reported. There was no prior history of autoimmune disease or symptoms of cerebral ischemia, and there were some comorbidities associated with it, such as hypertension. The surgical resection of the tongue lesion and bilateral supraomohyoid cervical neck dissection occurred as planned, but during the cervical neck dissection, bilateral kinking of the extracranial internal carotid artery was observed, as seen in figure 1, posing surgical challenges. This case highlights the importance of early recognition and appropriate management of these anatomical variations in order to prevent serious intraoperative complications.

Objectives: Due to its prevalence in an asymptomatic form, the extracranial internal carotid artery (ICA) kinking can be an anatomical finding. Despite limited scientific evidence, its potential association with cerebrovascular events has become important. This study aims to review the prevalence, classifications, etiology, risk factors, diagnostic, and clinical management of extracranial ICA kinking.

Methods: This case report follows CARE (Case Reporting) guidelines, detailing the clinical presentation, diagnostic process, and surgical management of an 82-year-old female with lingual squamous cell carcinoma and asymptomatic bilateral ICA kinking.

Results: The dolichoarteriopathies, also known as aberrant, are anatomical anomalies of the extracranial portion of the internal carotid arteries (ICA), typically asymptomatic and incidentally found during surgeries or imaging exams. The prevalence ranges from 2 to 69% in the general population, with certain studies indicating

a higher incidence among patients with symptomatic cerebrovascular insufficiency. These variations require classification for scientific studies, such as Weibel and Fields classification, which categorizes the morphology of the ICA into four types: straight, tortuosity, coiling, kinking, and angulation, varying between levels I, II or III. Moreover, etiologic hypotheses encompass the loss of arterial wall elasticity due to comorbidities such as hypertension and obesity, resulting in a process of stretching, buckling, and deformation; atherosclerosis, which is deemed to be more closely associated with kinking formation; and congenital factors from the third pharyngeal arch, which, in conjunction with acquired factors, may facilitate the twisting of the artery over time, resulting in the appearance of coiling. Diagnoses are typically incidental, however, imaging examinations such as doppler ultrasound, computed tomography angiography (CTA), magnetic resonance angiography (MRA), digital subtraction angiography (DSA), and single photon emission computed tomography (SPECT) can be utilized in symptomatic anomalies of the extracranial internal carotid artery investigations. Therapeutic management includes surgical treatment and pharmacological optimization, with surgical intervention recommended for symptomatic kinking or severe classifications. The objective of surgical correction is to prevent carotid thrombosis, ischemic stroke, and maintain cerebral perfusion. According to the clinical guidelines, it is generally not recommended for surgery in cases that are asymptomatic.

Conclusion: Current studies on the prevalence of dolichoarteriopathies show significant variation, preventing accurate prevalence statements. Despite the established classification of dolichoarteriopathies and kinking, diagnostic limitations often result in inconsistent data. Further studies are needed to determine the true association between kinking and adverse clinical outcomes, as well as the necessity for intervention.

Keywords: Carotid; Kinking; Neck; Head and neck; Vascular

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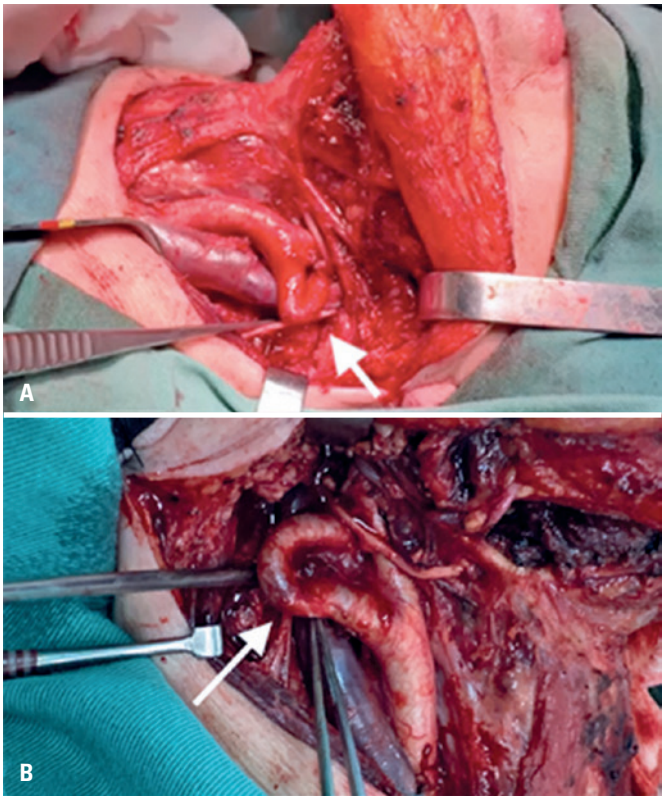

Figure 1. A) Left extracranial internal carotid artery; B) Right extracranial internal carotid artery

025

A rare case of nasal angiosarcoma with metastases and positive response to immunotherapy: a case report

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ABSTRACT

Introduction: Angiosarcoma is a rare and highly aggressive sarcoma that originates from the endothelial cells of blood vessels. Its occurrence in the nasal region is extremely rare and challenging, both in diagnosis and treatment. This tumor represents less than 1% of soft tissue sarcomas, and factors such as radiation exposure, chemical substances, and chronic diseases like lymphedema may be associated with its development.[1,2] Clinically, it can present as a cutaneous or subcutaneous lesion, often mistaken for benign dermatological conditions.[3] Diagnosis involves biopsies and imaging techniques to assess the extent and presence of metastases.[4] Treatment generally involves surgery, radiotherapy, and in advanced cases, chemotherapy and immunotherapy.[5] The prognosis is guarded due to the high recurrence rate and propensity for metastasis.[6]

Objectives: The aim of this case report is to highlight the complexity and challenges of diagnosing and treating nasal angiosarcoma, emphasizing the importance of a multidisciplinary approach and the effectiveness of immunotherapy in controlling metastases.

Methods: A case of a 75-year-old patient with a lesion on the right nasal dorsum, initially diagnosed as actinic keratosis and later as angiosarcoma, was described. The patient underwent total rhinectomy, followed by reconstruction with multiple local flaps, and adjuvant treatment with radiotherapy and immunotherapy. Follow-up included regular imaging studies to monitor disease progression and response to treatment.

Results: The patient had a complex clinical course, with rapid growth of the nasal lesion and metastases in various organs. Total rhinectomy and radiotherapy helped in local disease control, but the patient developed multiple metastases. Immunotherapy demonstrated significant efficacy, leading to partial resolution of metastatic lesions. Regular follow-up with imaging revealed a positive response to immunotherapy, with a reduction in liver lesions and stabilization of other metastatic lesions.

Conclusion: This case underscores the importance of a multidisciplinary approach in managing nasal angiosarcomas, combining surgery, radiotherapy, and immunotherapy. The positive response to immunotherapy highlights the need to consider emerging and personalized therapies in the treatment of rare and aggressive sarcomas. Continuous and rigorous follow-up is essential to adjust treatment as needed and optimize outcomes. The reported experience contributes to the limited literature on nasal angiosarcomas and may guide future therapeutic approaches.

Keywords: Nasal angiosarcoma; Endothelial cell sarcoma; Total rhinectomy; Immunotherapy in angiosarcoma; Diagnosis and treatment of rare angiosarcomas

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026

Diagnosis and management of inflammatory pseudotumor of the larynx: a case report

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ABSTRACT

Introduction: Inflammatory pseudotumor of the larynx is a rare benign condition characterized by an inflammatory mass composed of cells such as lymphocytes, plasma cells, and histiocytes, along with fibroblasts and myofibroblasts. Although non-cancerous, it can significantly impact the patient's quality of life due to its location in the larynx and its effects on respiratory and vocal functions. The etiology is uncertain but may be associated with infections, trauma, autoimmune diseases, or inflammatory reactions to foreign bodies.[1-3]

Objectives: To report a rare case of inflammatory pseudotumor of the larynx, highlighting the diagnostic challenges, clinical progression, and the importance of rigorous follow-up and multiple imaging modalities to ensure diagnostic accuracy and complete lesion resolution.

Methods: This case study involves a male patient, identified by the initials M.F.M., with a history of liver cirrhosis, referred for investigation of a left laryngeal lesion in June 2023. The patient presented with severe symptoms, including intense dysphagia, dyspnea, and significant weight loss, but without dysphonia or choking. The methodology adopted for this case study involved a comprehensive set of diagnostic exams to assess the extent and nature of the laryngeal lesion. A combination of nasoendoscopy, CT, ultrasound, and nasofibroscopy was used to monitor the lesion's progression and determine the treatment response. Case management included a detailed review of radiological and clinical findings, followed by a treatment plan involving close patient follow-up.

Results: On 06/11/2023, a nasoendoscopy revealed no visible lesions. On 23/06/2023, a CT scan showed an expansive lesion in the left larynx, obliterating the piriform sinus and infiltrating the infrahyoid muscles, with no visible lymph nodes. Subsequent exams, including a nasofibroscopy on 19/01/2024 and a neck CT on 15/04/2024, showed no significant lesions or lymph nodes. The final CT in April 2024 confirmed the absence of lesions, corroborating the resolution of the pseudotumor. Inflammatory pseudotumor of the larynx, though rare, should be considered in the differential diagnosis of laryngeal lesions. Clinical presentation can range from mild to severe symptoms, such as dysphagia and dyspnea. The absence of symptoms like dysphonia and choking in M.F.M.'s case complicated the initial diagnosis. Diagnosis confirmation was based on combined imaging results and the exclusion of other pathologies, including neoplasms. Management included rigorous monitoring and the use of multiple imaging modalities to ensure diagnostic accuracy.[4-6]

Conclusion: This case highlights the importance of a comprehensive differential diagnosis and close follow-up to ensure the complete resolution of rare inflammatory lesions such as inflammatory pseudotumor of the larynx. Clinical progression and imaging results were crucial for patient management. The absence of significant lesions in the final CT corroborated the pseudotumor resolution, and the recommended conduct included a new contrast-enhanced neck CT for comparison. If no

significant changes are observed, patient discharge with regular clinical follow-up is considered appropriate. This case emphasizes the need for follow-up exams to confirm the complete resolution of the lesion before considering patient discharge.[7,8]

Keywords: Inflammatory pseudotumor of the larynx; Differential diagnosis; Computed tomography; Nasoendoscopy

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027

Late liver metastases from oropharyngeal HPV 16-positive squamous cell carcinoma: an unexpected outcome

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ABSTRACT

Introduction: Squamous cell carcinoma Oropharyngeal (OSCC) has two different possible etiopathogenic profiles: related to tobacco and/or alcohol abuse; and the more recent human papilloma virus (HPV)-driven subtype. Loco-regional control rates are excellent in the majority of p16-positive (OPSCC) patients, and poor outcomes are mainly attributable to distant metastasis (DM). The DM rate varies from 5% - 12% in recent non-surgical series of OPSCC and from 2% - 6% in the surgical series.(1)

Objective: Report a rare case of multiple cystic liver metastasis from HPV 16-positive squamous cell carcinoma primary of the palatine tonsil and demonstrate that HPV-positive tumors can behave aggressively while maintaining a good response to treatment.

Methods: Review of the literature on metastasis patterns of HPV-positive oropharyngeal tumors and a rare case report.

Results: A 45-year-old male patient with diagnosis of HPV-positive OPSCC (T2N2cMx) underwent robotic-assisted ressection and adjuvant chemoradiotherapy. Follow-up imaging exams were performed, with no evidence of changes suggestive of locoregional relapse or distant metastasis during the first years. However, four years after the initial diagnosis a contrast-enhanced computed tomography (CECT) showed an enlarged liver with multiple cystic lesions positive for p16+ malignant cells. This patient died a few days later. Analyzing current studies on distant metastases in head and neck scamous cell carcinoma, observed that historic survival was 6-9 months with palliative therapy. However, the prognosis and survival of HPV+OPSCC with distant metastases is significantly better. The incidence of metastasis from HNSSC is higher during the first eight months after diagnosis, being progressively unlikely after this period.(2) Factors associated with lower distant control rates are advanced-stage disease, locoregional failure (relapse or persistent tumor), and HPV-negative status (in OPSCC).(3) 20% of HPV-positive distant metastases exhibited an “explosive” character (similar to our case) characterized by numerous metastatic lesions occupying almost entire organs such as the lung or liver, and developing over a relatively brief period.(2) Our case illustrates an patient presenting multiple cystic liver metastases 4 years late after diagnosis even after complete treatment with surgery associated with chemoradiotherapy with local regional control. This unusual appearance of distant metastases suddenly leading to liver failure demonstrates that HPV-positive tumors have aggressive potential.

Conclusion: Distant metastasis from HPV-positive squamous cell carcinoma, although rare, carries a poor prognosis and may have unusual presentations. Awareness of the atypical clinical behavior of some HPV+ OPSCC is important. This includes considering the frequency and type of radiologic exams for post-therapy surveillance and initial staging. Treatment deintensification studies have been successful in

locoregional control, but the reduction in distant metastases is not well established.

Keywords: Oropharynx cancer; Remote operation robotics; Distant metastasis

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028

Adenosquamous carcinoma of the oral tongue without secondary cervical lymph nodes metastases: a case report

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ABSTRACT

Introduction: Adenosquamous carcinoma (ASC) is a rare neoplasm that originates from the surface epithelium. It was first reported in 1968 as an aggressive lesion.(1) It has a male predisposition and tends to develop in the 6th and 7th decade.(2) Few cases (less than 30 cases so far) have been reported in the tongue, since the most frequent site in the head and neck is the larynx and hypopharynx.(3) We reported a case of oral tongue ASC without secondary lymph nodes metastases and reviewed literature.

Case Report: A 41-year-old woman, medical and family history was not special, no continuous use of medications, complained of aphtha since November 2023. No use of tobacco nor alcohol. On early May 2024, the patient was forwarded to a head and neck surgeon from a stomatologist, whose incisional biopsy was ASC. There was a non-ulcerated with submucosal induration on the lateral side of the right tongue (Figure 1). No sign of clinical lymph nodes metastasis during cervical palpation. Flexible Laryngoscopy was normal. Right partial glossectomy was performed on May 22nd, 2024. Frozen section (FS) biopsy showed positive margins in the following areas: deep and inferior margin. In the same surgical time, the deep and inferior margins were enlarged, ensuring clear margins by FS. The pathologist was not able to confirm the same diagnosis as the previous biopsy due to FS limitations. Histopathological examination findings: ASC, 2,0 x 1,5cm, depth of invasion (DOI) of 8mm, with perineural invasion and positive deep and inferior margins. Also, enlargement fragments showed clear margins. pT2N0M0 (The UICC 8th TNM Classification). After the first surgery, PET-CT FDG-18F was performed and revealed increased metabolite in right cervical lymph nodes level IIB (SUV 2,6 - 1,1 x 0,7 cm) and level III (SUV 3,0 - 0,7 x 0,4 cm), both suggesting cervical metastases and no evidence for distant metastases. Bone scan also ruled out bone lesions. On June 19th, 2024, was performed selective lymph node dissection on right side (level I, II, III, IV). Histopathological examination findings: 12 lymph nodes with sinusal histiocytosis but without metastatic disease and chronic sialadenitis. Currently, radiotherapy is the adjuvant treatment.

Discussion: ASC may present as an exophytic or polypoid mass or as mucosal induration or ulceration and even like SCC.(3) ASC is characterized histologically by two components: SCC and adenocarcinoma. Despite the proximity, the two components tend to be distinct to each other. SCC part is seen in the superficial part of the lesion and generally arranged in the form of solid nests or islands of malignant epithelial cells arising from the dysplastic surface epithelium. Adenocarcinoma part occurs in the deeper parts of the tumor with

tubular structure. The tumor shows necrosis, mitoses, and vascular and perineural invasion consistent with its high-grade nature.[2] Differential diagnosis includes mucoepidermoid carcinoma, acantholytic SCC, conventional SCC and basaloid SCC.[2] Smoking and alcohol consumption are likely predisposing factors and there is no association with HPV so far.[2] The prognosis is poor with a high propensity for recurrence and dissemination. Regional lymph node metastases occur in about 75% of patients, and nearly 25% of patients develop distant metastases mainly to the lungs. The 5-year survival rate is approximately 13-50%. Half of the patients die of disease after a mean of 23 months (range 12-35 months).[3]

Conclusion: ASC, being highly infiltrative and metastatic, its diagnosis must not be delayed, and it needs to be treated with surgical intervention with a wide surgical margin associated with radiation and/or chemotherapy.[2] Elective neck dissection should be considered based on adverse pathologic features of the primary lesion such as DOI, positive margin, perineural and/or intravascular invasion even in cases without cervical metastases of ASC T1 and T2 such as the presented case.[3]

Keywords: Adenosquamous carcinoma; Tongue cancer; Secondary cervical lymph node metastases; Adenocarcinoma; Squamous cell carcinoma

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Figure 1. Image of the lesion localized on the lateral edge of the right side of the tongue

029

Case report of an adolescent male patient midline cervical mass and dysphagia

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ABSTRACT

Introduction: Epidermoid cysts, also known as epidermal inclusion cysts, are benign growths that originate from the epidermis. They result from the proliferation of epidermal cells within a circumscribed space of the dermis. These cysts are filled with keratin and lipid-rich debris and are encased by a stratified squamous epithelium. The incidence is common, accounting for approximately 85-90% of all cutaneous cysts. They can occur at any age but are most frequently observed in adults. There is a slight male predominance. These cysts are generally asymptomatic and slow-growing.

Objective: The present study aims to report a case of an adolescent male presented with a rapidly growing mass in the midline of the cervical region at level 1, which subsequently led to the development of dysphagia due to the tumor's size. Underwent resection via transoral approach.

Methods: A descriptive study that provides a detailed account of the symptoms, diagnosis, treatment, and follow-up of an Adolescent Male Patient with a Rapidly Growing Midline Cervical Mass and Dysphagia

Results: Negative fine-needle aspiration (FNA) for neoplasia, suggestive of an epidermoid cyst. Histopathology confirmed an epidermal inclusion cyst.

Conclusion: Epidermoid cysts are common, benign cutaneous lesions that are typically diagnosed based on clinical features. They can occur anywhere on the body and are usually asymptomatic. The differential diagnosis for epidermoid cysts includes: pilar cysts, dermoid cysts, congenital cysts, lipomas, sebaceous cysts. While observation is sufficient for many patients, complete surgical excision is the treatment of choice for symptomatic or cosmetically concerning cysts. The prognosis is excellent with proper management, and complications are rare.

Keywords: Epidermoid cyst; Dysphagia

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Presentation Abstracts

CONTENTS

030

Intrathyroidal thymus in a pediatric female patient: a case report

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ABSTRACT

Introduction: Intrathyroidal thymus is a rare congenital anomaly characterized by the presence of ectopic thymic tissue within the thyroid gland. This condition is often discovered incidentally during imaging studies or surgical procedures for other thyroid conditions. The incidence of intrathyroidal thymus is very low, with only a few cases reported in the medical literature. Most cases are diagnosed in children, but it can occur at any age. The exact prevalence is unknown due to its rarity and often asymptomatic nature.

Objective: The present study aims to report a case of a female pediatric patient presenting with a thyroid nodule suggestive of malignancy (TIRADS 5). Intraoperative fine-needle aspiration (FNA) was inconclusive, and due to the high risk of malignancy, the patient underwent a total thyroidectomy.

Methods: A descriptive study that provides a detailed account of the symptoms, diagnosis, treatment, and follow-up of a pediatric female patient presenting with a thyroid nodule suggestive of malignancy (TIRADS 5).

Results: Histopathological and immunohistochemical examinations were conducted on the excised tissue revealed the presence of ectopic thymic tissue.

Conclusion: Intrathyroidal thymus is a rare and typically benign condition that is often diagnosed incidentally. Imaging studies are crucial for diagnosis, and management ranges from observation to surgery, depending on symptoms and the extent of thymic tissue. Despite its rarity, awareness of this condition is important to avoid misdiagnosis and unnecessary treatment.

Keywords: Ectopic thymus; Thymus gland; Thyroidectomy; Case report

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031

Difficulties in accessing Unified Health System healthcare services: case report of recurrent skin tumor

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ABSTRACT

Introduction: The Unified Health System (SUS) in Brazil faces ongoing challenges, widely discussed in health policy panels, including difficulties in access, inadequate remuneration, and a shortage of professionals. These problems directly affect patients requiring specialized treatments, such as those with malignant tumors. This case report describes the barriers faced by a patient with a recurrent skin tumor and the progression of his condition due to limitations in accessing healthcare services.

Objective: To describe a clinical case of recurrent skin tumor, highlighting the difficulties in accessing treatment within SUS and its clinical implications.

Methods: A descriptive study retrospective analysis of medical records, images, and interviews with involved healthcare professionals was conducted. The patient, a 58-year-old man diagnosed with squamous cell carcinoma, underwent an initial surgical resection. Between the first and second interventions, there was rapid tumor progression and difficulties in scheduling surgery due to high patient demand.

Results: After the initial resection performed by a service surgeon, the patient experienced rapid recurrence of the carcinoma. During the interval between the first and second surgeries, scheduling was significantly delayed by the high demand and limited resources within SUS. The prolonged wait resulted in aggressive tumor progression, requiring a much more extensive resection. Upon reevaluation, it was found that the tumor's extent necessitated the removal of the sternocleidomastoid muscle and the internal jugular vein, as well as a complex reconstruction. The subsequent surgery was significant, involving a multidisciplinary team and additional resources, underscoring the impact of barriers to treatment access.

Conclusion: This case report highlights the severe clinical consequences of limited access to healthcare services within SUS. The delay between surgical interventions, due to high demand and insufficient resources, resulted in accelerated tumor progression, necessitating more invasive and complex surgery. The case underscores the urgent need for improvements in resource management, healthcare professional allocation, and adequate remuneration to ensure that patients with serious conditions, such as malignant tumors, receive timely and effective treatment. Additionally, it emphasizes the importance of effective and continuous communication between patients and healthcare services, facilitated by technologies such as messaging apps, which can help mitigate delays in care. Addressing these challenges is crucial to improving the quality of care within SUS and ensuring that all patients have access to high-quality healthcare, regardless of their condition or location.

Keywords: Unified Health System; Skin cancer; Challenges; Case report

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032

Positive response to neoadjuvant chemotherapy in a case of skin squamous cell carcinoma with nasal tumor

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ABSTRACT

Introduction: Squamous cell carcinoma of the skin, also known as epidermoid neoplasia, is a type of skin cancer that can affect various regions of the body, including the face. Early diagnosis and appropriate treatment are fundamental to reducing morbidity and improving prognosis. Neoadjuvant chemotherapy, which involves the administration of chemotherapeutic agents before surgical treatment, can be an effective strategy to reduce tumor size and allow for less invasive resections.

Objective: To report the case of a patient with well-differentiated squamous cell carcinoma in the nasal region, emphasizing the positive response to neoadjuvant chemotherapy that enabled a less invasive surgical resection.

Methods: This is a retrospective descriptive study providing a detailed account of the symptoms, diagnosis, treatment, and follow-up of a 43-year-old male patient who presented with a lesion in the nasal region.

Results: The lesion began as a small wound that increased in size, associated with pain but without fever or bleeding. The patient had untreated hypertension and was diabetic, on Metformin 500 mg twice a day. Physical examination revealed an exophytic tumor occupying the entire nasal region, with nasal cavities occluded by the lesion. The lesion's mobility was preserved, with a maximum diameter of 5cm, without invasion of the philtrum and no palpable cervical lymphadenopathy. A biopsy confirmed the diagnosis of well-differentiated squamous cell carcinoma. A computed tomography (CT) scan of the face and neck performed on 03/27/2024 revealed an expansive cutaneous lesion affecting the nasal dorsum, apex, and nostrils, with deep extension to the anterior third of the septal cartilage, measuring 3.3 x 3.0cm and with a thickness of 1.2cm, without signs of bone invasion. The CT concluded that there was an expansive cutaneous lesion affecting the nasal dorsum, apex, and nostrils, with deep extension to the anterior third of the septal cartilage, without signs of bone invasion, and cervical lymph nodes of unusual morphology in levels IB and IIA bilaterally and in level III on the right, nonspecific. Neoadjuvant chemotherapy with TPF (docetaxel, cisplatin, and 5-fluorouracil) was proposed, combined with granulokine rescue, in a regimen of 4 cycles lasting 5 days with 21-day intervals. After the second cycle of chemotherapy, significant improvement in the nasal lesion was observed, as documented in photographs. The positive response to treatment allowed for a reduction in tumor volume, facilitating a less extensive surgical resection. The patient was then referred for partial nasal amputation with reconstruction, minimizing surgical morbidity and preserving aesthetic and respiratory functions.

Conclusion: This case demonstrates the efficacy of neoadjuvant chemotherapy with TPF in significantly

reducing the volume of a well-differentiated squamous cell carcinoma in the nasal region. The response to treatment allowed for a less extensive surgical resection, resulting in lower morbidity and preservation of aesthetic and respiratory functions. This case report reinforces the importance of multidisciplinary management and early, individualized treatment in patients with skin neoplasias.

Keywords: Squamous cell carcinoma; Neoadjuvant chemotherapy; Nasal tumor

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033

Calciphylaxis in hyperparathyroidism secondary, a case report

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ABSTRACT

Introduction: Calciphylaxis or calcific uremic arteriopathy is a rare pathology that occurs most frequently in patients with end-stage chronic kidney disease (CKD), with limited data regarding its exact pathophysiology and treatment. Being a little-known disease, it carries high rates of morbidity and mortality, making it difficult to establish an early diagnosis. It is characterized by calcification of cutaneous blood vessels caused by alteration in bone mineral metabolism that causes ischemia and finally skin necrosis. Within the treatment there is multidisciplinary management to reduce pain, care of the injury and control of calcium and phosphorus alterations. In cases of severe hyperparathyroidism, parathyroidectomy is suggested. We present the case of a patient with secondary hyperparathyroidism associated with chronic kidney disease with a parathyroid hormone (PTH) >4000pg/mL, where total parathyroidectomy with autograft was indicated to control calcium and phosphorus alterations known as predisposing factors and aggravating the disease.

Case report: A 56-year-old female patient with a history of systemic arterial hypertension and chronic kidney disease, with a history of kidney transplant, presenting loss of the kidney graft and restarting hemodialysis in 2015 using cinacalcet, B complex, propranolol, atorvastatin, amlodipine, cholecalciferol, iron and sevelamer hydrochloride came for medical evaluation due to chronic skin lesions requiring hospitalization due to evidence of necrotic skin lesions in large areas of the lower limbs without involvement of vascular pulses (Figure 1).

Complementary tests were performed showing a parathyroid hormone >4000pg/mL, with total calcium of 9.8 mg/dL and phosphorus of 7.2 mg/dL. Parathyroid scintigraphy reported glandular hyperfunction without evidence of ectopic locations (Figure 2), the ultrasound study of the cervical region indicated multiple thyroid nodules apparently without malignant characteristics that could correspond to hypertrophied parathyroids (Figure 3), a skin biopsy was performed that reported necrosis of the vascular walls of the dermis and hypodermis, which contributed to the diagnosis of calcific uremic arteriopathy. For management, debridement of the skin lesions was performed, and to control the mineral alteration of phosphorus and calcium, it was decided to perform a total parathyroidectomy with

autograft in the right upper limb with a drop in PTH levels of approximately 82% at 15min, during the surgical procedure the thyroid gland was evident with multiple nodules with the presence of a nodule of approximately 1cm in the left lobe suggestive of malignancy, so it was decided to perform a lobectomy, it was sent for freezing with the result of thyroid carcinoma. which led to the performance of a total thyroidectomy given the evidence of other nodular lesions in the thyroid gland. The patient is discharged 30 days after the surgical procedure with clinical improvement of the skin lesions, adequate pain control, and calcium and phosphorus levels within expectations. The pathological study indicated a papillary microcarcinoma of the thyroid and 4 hyperplastic parathyroid glands.

Discussion: Calciphylaxis or calcific uremic arteriopathy is a rare and serious disease characterized by ischemia and necrosis of the skin. It occurs most frequently in patients with end-stage kidney disease, kidney transplant recipients, and can rarely be observed in people without kidney disease who have pathologies associated with primary hyperparathyroidism, malignancy, alcoholic liver disease or connective tissue diseases. In the case of the patient in the study, she has chronic kidney disease on hemodialysis with a history of kidney transplant, contributing to the epidemiology noted in the literature.[1]

It has a high morbidity and mortality, with an approximate 6-month survival of 40%.[1] Its histopathology has not been fully clarified, but it is considered that the skin lesions are produced by a reduction in arteriolar blood flow due to calcification caused by a positive regulation of osteogenesis and bone remodeling factors, in addition to the contribution of inflammatory factors produced by adipocytes generating endothelial injury and fibrosis, which leads to a decrease in vascular diameter, stasis and thrombosis, compromising the arterioles and capillaries of the dermis and hypodermis, causing ischemia and tissue necrosis.[1.2] Among the predisposing factors for the development of calciphylaxis, hyperparathyroidism is mentioned since historically studies were carried out in animals showing that the administration of large amounts of PTH generated skin ischemia; in addition to observing that parathyroidectomy is associated with clinical improvement in some patients, which may be justified by the reduction in serum levels of calcium and phosphate that occurs after surgery due to the transient uptake of these minerals in the bone. Similarly, in the study evaluating cinacalcet for the treatment of hyperparathyroidism, there was a reduction in the risk of developing calciphylaxis, however the results are limited.[3] Another predisposing factor is the use of calcitriol or other vitamin D analogues in high doses in patients with chronic kidney disease on hemodialysis, contributing to calciphylaxis through its actions to increase serum calcium and phosphorus, in addition to presenting direct effects. on the vasculature which is apparently determined by polymorphisms in the genes encoding the vitamin D receptor (rs17882106 and rs10783223) and fibroblast growth factor 23 (rs7310492, rs11063118 and rs13312747) but further evaluation of these findings is needed.[2-4] Deficiency of vascular calcification inhibitors may play a role in the pathogenesis of calciphylaxis, including fetuin-A (2-Heremens-Schmid glycoprotein) and matrix Gla protein (MGP). Fetuin A is a serum glycoprotein that binds calcium and phosphorus in the circulation, thus forming calciprotein particles that help clear the circulation of excess Ca and P, limiting organ and soft tissue calcification and calcium deposition. vascular. Vitamin D-stimulated tissue calciphylaxis and chronic inflammation states in hemodialysis patients are associated with lower amounts of fetuin-A.[2]

MGP is an extracellular matrix protein synthesized by vascular smooth muscle, endothelium and chondrocytes, binds minerals and inhibits calcification of arteries and cartilage. Its activity depends on vitamin K-dependent carboxylation, with warfarin being a risk factor for calciphylaxis.[2] In addition, other risk factors for the development of calciphylaxis in patients with end-stage renal disease are known to be female sex, obesity with a BMI >30, hyperphosphatemia, medications such as warfarin, calcium-based binders, vitamin D analogues, glucocorticoids , hypercoagulable states such as antiphospholipid syndrome, systemic lupus erythematosus, protein C and S deficiency, hypoalbuminemia and diabetes.[1-3] The symptoms are characterized by pain associated with skin lesions that initially appear as violaceous subcutaneous nodules that progress to ulcers with areas of necrosis and in advanced cases of vascular thrombosis they form bedsores. The skin areas most affected are the extremities, as it is a disease that affects the cutaneous blood vessels, the peripheral pulses remain intact, which allows a differential diagnosis to be made with other vascular pathologies. Laboratory tests show increased levels of PTH, calcium and phosphorus. Taking a biopsy is indicated in cases of doubt about the diagnosis of atypical skin lesions or in the initial stages of the disease, taking the sample from the edges of the lesion, avoiding areas of necrosis, and dermohypodermic and panicular arteriolar calcification, subintimal fibrosis, may be evident. and thrombotic occlusion without vasculitic changes. Imaging studies should be performed in cases of suspected superinfection.[2-4] In the early stages of the

disease it can be misdiagnosed since it does not present typical clinical characteristics. The diagnostic hypothesis is raised in patients with end-stage chronic kidney disease or patients with risk factors who present ulcerated skin lesions that do not heal covered by a black eschar.[2] Treatment is based on multidisciplinary management that includes pain control, control of predisposing factors and wound care with chemical debridement and in selected cases the use of negative pressure therapy. Surgical debridement is indicated in wounds with a significant necrotic load. and in infected lesions in addition to the use of antibiotics. The use of medications to treat hyperphosphatemia using phosphate binders that do not contain calcium, reduction of PTH with the use of cinacalcet to maintain a PTH level between 150 and 300pg/mL, is recommended for patients with PTH >600pg/mL, despite the use of cinacalcet in high doses for more than one month, parathyroidectomy is suggested or in cases of severe hyperparathyroidism, PTH >800pg/mL. An excessive decrease in PTH <100pg/mL should be avoided to prevent hungry bone syndrome that aggravates vascular calcification. In the case of our patient, multidisciplinary management was performed to control pain, surgical debridement and management of phosphorus and calcium alteration with total parotidectomy with autograft since the patient had PTH levels >4000pg/mL. In patients with kidney disease on hemodialysis with refractory hyperphosphatemia, the frequency and duration of hemodialysis can be increased.[3-5] Use of sodium thiosulfate used for its vasodilatory and antioxidant action that also blocks the ability of adipocytes to generate cellular calcification of vascular smooth muscle; however, there are not enough studies to support its use.[3] The response to treatment is monitored clinically by evaluating the intensity of pain, the morphology and dimensions of the lesions with granulation tissue formation.[4,6] In cases of resistant disease considered when the patient still has kidney lesions after 3 months of treatment, hyperbaric oxygen therapy or experimental therapies with the use of tissue plasminogen activator, use of prednisone are increased and improvement of skin lesions has been seen in transplant patients after 2 to 4 months after transplant.[4,6] In our patient, there was clinical improvement in pain and skin lesions after total parathyroidectomy with self-implantation, improving her quality of life.

Conclusion: Calciphylaxis is a rare disease, little understood in exact terms of pathophysiology where apparently several factors are associated that cause calcification of cutaneous blood vessels. It is a pathology that occurs most frequently in patients with chronic kidney disease; however, it is evident that it can occur in isolated cases of people with immunological diseases or chronic states of inflammation. There is no specific approved treatment, management is based on the combination of multiple treatments to obtain symptomatic control and control the factors that predispose calcification.

Keywords: Calciphylaxis; Hyperparathyroidism

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SGPP number: Not applicable.

CAAE: Not applicable.

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Figure 1. 56-year-old patient with CKD presenting extensive necrotic skin lesions on the lower limbs

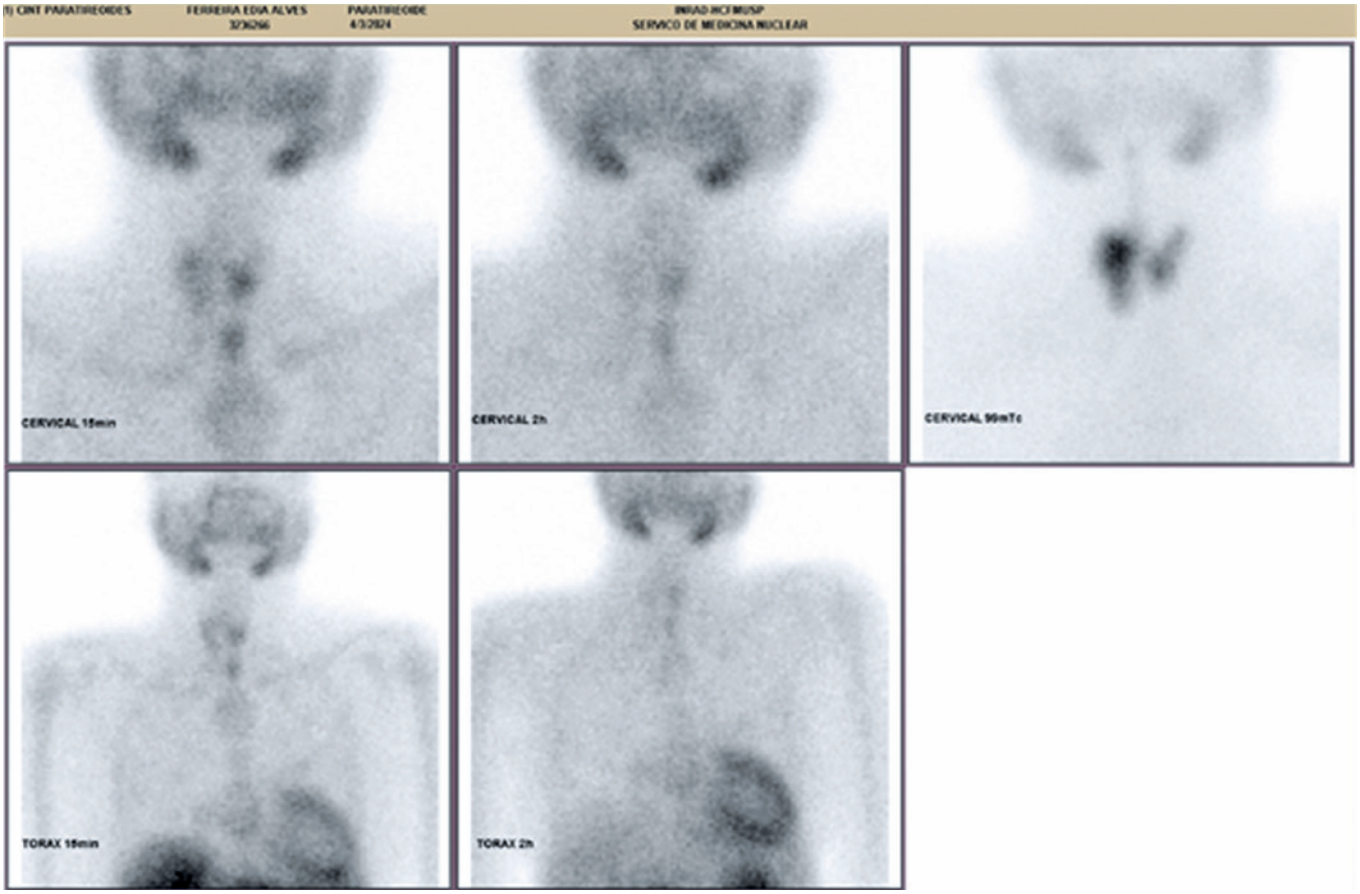

Figure 2. Scintigraphic angles suggestive of hyperfunctioning parathyreoids projected at the lower pole of the left lobe and inferiorly to the left thyroid lobe and bone attack for osteometabolic disease. No evidence of ectopic glands

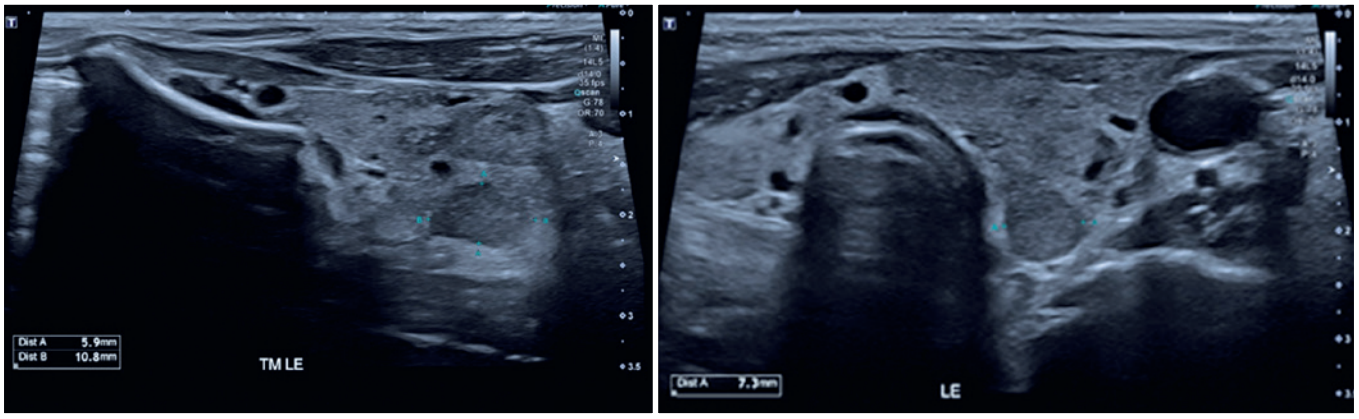

Figure 3. USG of the thyroid Thyroid with multiple nodules: mixed nodule, isoechoic, with gross calcification and poorly defined margins, not in the middle of the direct lobe, measuring 0.5 x 0.3 x 0.7 cm (ACR-TIRADS: 3). Solid, hypoechoic, circumscribed nodule, mostly parallel to the skin, with macrocalcification, located in the middle of the right side, measuring 0.7 x 0.4cm (ACR-TIRADS: 4). Solid, hypoechoic, circumscribed nodule, mostly parallel to the skin, located in the middle of the right side, measuring 0.7 x 0.3 cm (ACR-TIRADS: 4). Predominantly solid nodule, isoechogenic, with well-defined margins, not on the middle/inferior side of the left side, measuring 0.8 x 0.7 x 0.9cm (ACR-TIRADS: 3). We note two extra-thyreoid images, after the third half of the left wolf, solid, hypoechogenic, with well-defined contours and approximate measurements of 0.8cm and 0.6cm in their largest sizes. Bent esses are suggestive of hypertrophied parathyreoids

Presentation Abstracts

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034

Case Report - role of immunotherapy in squamous cell carcinoma of the larynx

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ABSTRACT

Introduction: Squamous cell carcinoma (SCC) is the most prevalent malignant neoplasm of the larynx, representing 95% of cases. Other benign and inflammatory lesions are less common, comprising less than 5% of laryngeal tumors. SCC typically presents as a mucosal lesion, initially investigated through indirect laryngoscopy and biopsy. Diagnosis and staging are often complemented by computed tomography (CT) scans and occasionally magnetic resonance imaging (MRI). Treatment varies according to clinical staging.

Objective: This work aims to report the clinical case of a patient with laryngeal SCC who received immunotherapy as part of their treatment.

Methods: This study utilized a case report methodology, a qualitative approach commonly used in medicine to describe in detail the clinical trajectory of a specific patient.

Case report: Patient N.B.P., male, began follow-up at 52 years old in 2018 with complaints of hoarseness, odynophagia, and choking for the past 30 days. History of smoking (22 pack-years) and significant alcohol consumption stopped a year ago. Physical examination revealed a lesion on the left vocal fold, involving the left arytenoid and left ventricular fold, with preserved mobility of the vocal folds. No lymphadenopathy was noted, staged as cT2N0M0. Initially opted for radiation therapy (6996 cGy) and chemotherapy with taxol (3 cycles) aiming for organ preservation. The patient showed reduction in the lesion, but in 2019 developed significant dyspnea, requiring a tracheostomy. A new evaluation detected a lesion on the left vocal fold extending to the glottis (cT3N0M0), necessitating surgical intervention. In 2020, a total laryngectomy with radical left neck dissection was performed. In 2021, another surgical intervention was required, with tracheostomy resection and re-implantation due to local recurrence. In 2023, imaging studies showed nodal recurrence confirmed by fine needle aspiration, involving the common carotid, leading to the initiation of immunotherapy, with a good response and disease stabilization.

Discussion: Currently, the treatment modalities for laryngeal SCC include chemotherapy, radiation therapy, surgery, and immunotherapy. Chemoradiotherapy is often used as the initial treatment for laryngeal SCC, especially in intermediate and advanced stages, aiming for organ preservation and reduction of morbidity associated with radical surgical procedures. In this modality, ionizing radiation is used to induce DNA and cellular damage in neoplastic cells, leading to apoptosis or necrosis of malignant cells. Radiation therapy can be combined with chemotherapy to improve therapeutic outcomes. This approach preserves the patient's organ and voice but may come with complications or the possibility of treatment resistance. Surgical procedures, either partial or radical involving complete laryngeal removal, are indicated for patients who fail chemoradiotherapy, experience recurrence, or have advanced disease with organ dysfunction. However, surgery significantly impacts the patient's quality of life, resulting in voice loss, permanent tracheostomy, and extensive rehabilitation needs. Immunotherapy

is an innovative therapeutic approach that utilizes the patient's immune system to fight cancer. It works by inhibiting key immune checkpoints such as CTLA-4, PD-1, and PD-L1, allowing the immune system to recognize and attack cancer cells. In the context of laryngeal SCC, drugs such as Pembrolizumab, Dostarlimab, and Nivolumab are used. This treatment shows promise in improving overall survival with fewer side effects compared to conventional chemotherapy.

Conclusion: The benefits of immunotherapy in treating laryngeal SCC are evident, increasing survival and enhancing the quality of life, especially in palliative care. Treatment decisions should be individualized, considering the patient's clinical condition, tumor staging, and responses to previous therapies.

Keywords: Immunotherapy; Squamous cell carcinoma; Larynx

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Presentation Abstracts

CONTENTS

035

Surgical approach to cervical osteochondroma with rare malignant transformation: case report

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ABSTRACT

Introduction: Osteochondroma is the most common benign bone tumor, often found in extremities, but rarely in the spine. Although generally asymptomatic, it can occasionally cause serious complications. Additionally, there is a risk of malignant transformation to chondrosarcoma, especially in cases of hereditary multiple exostoses.

Case report: A 48-year-old male patient with multiple osteochondromatosis presented with a rapidly growing right cervical nodule over the course of a year, extending into the thorax. He experienced paresthesia and pain in the right upper limb. A neck CT scan revealed an exophytic bone lesion originating from the anterior tubercle of the right C6 transverse process. A large, expansile, heterogeneous soft tissue component with polymorphic calcifications, consistent with chondroid matrix, projected into the lower right cervical region. There was displacement of the right thyroid lobe and trachea contralaterally, and the sternocleidomastoid muscle anterolaterally, without signs of invasion. The lesion measured approximately 8.8x6.2x6.6 cm, involving the corresponding transverse foramen, with probable involvement of the right vertebral artery (Figure 1). The findings were suggestive of osteochondroma with signs of malignant degeneration. A cerebral arteriography showed total occlusion of the right vertebral artery, severed near its origin. The carotid artery was deviated with a negative balloon test after its origin. On the eve of surgery, physical examination revealed a hard and fixed mass of about 12 cm. A modified "cup" incision was made on the right side, extending to the retroauricular region and anteriorly to the supraclavicular region. The tumor occupied the deep part of the neck, adjacent to the vertebrae, displacing the carotid artery and vagus nerve anteriorly and the jugular vein laterally (Figure 2). The brachial plexus, phrenic, vagus, accessory, and hypoglossal nerves, common carotid artery, and internal jugular vein were dissected and preserved. Complete resection and level 2B lymph node dissection on the right side were performed (Figures 3 and 4). The patient developed right Horner syndrome and asymptomatic elevation of the right hemidiaphragm. The diagnosis was well-differentiated chondrosarcoma.

Discussion: Osteochondroma is the most common benign bone dysplasia, accounting for about 40% of benign bone tumors and 10% of bone tumors. Osteochondromas can present as solitary lesions or as part of the autosomal dominant hereditary syndrome known as hereditary multiple exostoses (HME). They develop when small cartilage fragments from the growth plate herniate through the periosteum and continue to undergo endochondral ossification, resulting in bone tumors with cartilaginous caps. They typically occur in the appendicular skeleton, with only 1% to 9% of cases occurring in the spine. Between 50% and 58% of spinal osteochondromas are found in the cervical spine, most commonly in the posterior elements.[1,2] The lifetime risk

of malignant transformation, such as to chondrosarcoma, is low but can increase to 5% in individuals with HME due to mutations in the EXT1 or EXT2 genes. Chondrosarcomas are a heterogeneous group of tumors containing malignant cells with differentiation into hyaline cartilage. These tumors can occur primarily or secondarily to preexisting cartilaginous conditions, including solitary or multiple osteochondromas or multiple enchondromas, as seen in Ollier disease or Maffucci syndrome. Prognostic factors affecting patients with secondary chondrosarcoma originating exclusively from osteochondroma remain uncertain.[3]

Final comments: This case of multiple osteochondromatosis and a rapidly growing cervical osteochondroma exemplifies the risks associated with malignant transformation of these tumors. The presence of symptoms such as paresthesia and pain, along with imaging findings indicating malignant degeneration, underscores the importance of rigorous monitoring and early intervention. This report aligns with the literature, which highlights the increased risk of malignant transformation in multiple osteochondromas and the importance of appropriate diagnosis and management.

Keywords: Osteochondroma; Vertebral artery; Carotid artery

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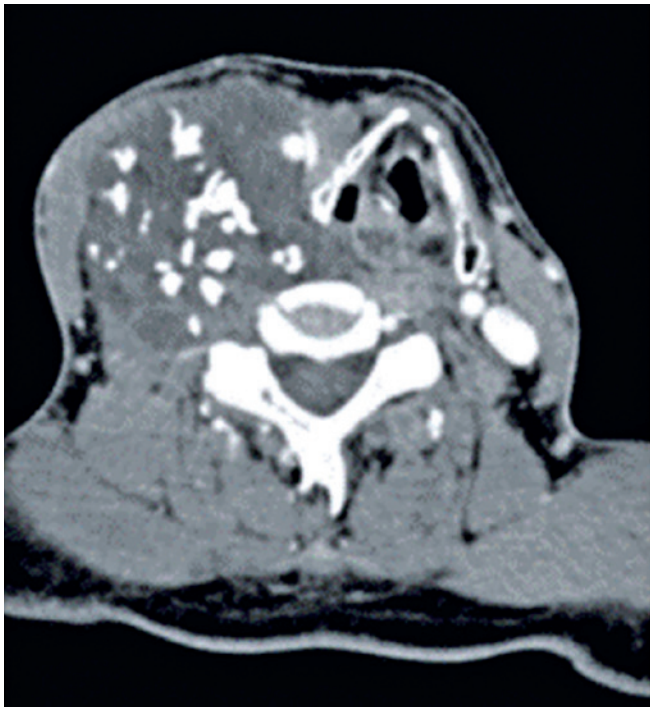

Figure 1. A hard and fixed cervical mass with multiple calcifications and displacement of structures, pedunculated to the transverse process of the C6

Figure 2. The jugular vein is displaced laterally over the lession. The vagus never and carotid artery are displaced anteriorly towards the larynx

Figure 3. Outcomes with the preservation of structures

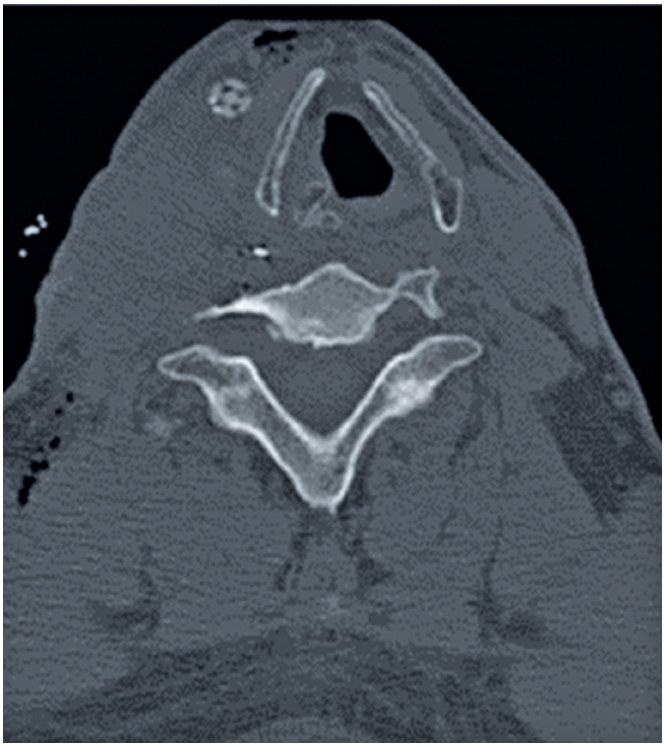

Figure 4. Postoperative day 1: resection of the tumor and the anterior portion of the C6 vertebra. Visualization of a clip and drain in the bed

Presentation Abstracts

036

A rare case of cutaneous metastasis in oral squamous cell carcinoma

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ABSTRACT

Introduction: Most cancer in the head and neck is squamous cell carcinoma (HNSCC) and the majority is oral squamous cell carcinoma (OSCC). Cutaneous metastasis from solid tumors are an uncommon event in clinical practice.(1) They correspond to 0.7% of metastatic cancers in OSCC. There is controversial evidence of GALR2, one of three known receptors for the neuropeptide galanin, as either an oncogene or a tumor supressor.(2)

Case report: A 54-year-old male Brazilian patient with a history of smoking and ethanol consumption was referred to *Hospital Fundação Santa Casa de Araraquara*, São Paulo, Brazil, with a diagnosis of OSCC classified as T4aN2bMx, based on TNM classification criteria of the UICC/AJC (American Joint Committee for Cancer Staging). Glossectomy-mandibulectomy was performed two months after diagnosis. The tumor measured 6x3cm and the anatomopathological result was well-diferentiated squamous cell carcinoma. Histopathologically, there was neoplasm-compromised adjacent striated muscles and mandibular bone, widespread angiolymphatic invasion, and focal tumor necrosis. Thereafter, metastasis of OSCC was found in the skin (neck and back) eleven months later. Patient is currently under treatment with chemotherapy. Primary tumor and venous blood were collected and analyzed at the *Universidade Estadual de São Paulo*. RT-qPCR showed low Galanin and high FOXP3 expression in the tumor; high GALR2 expression both in the tumor and PBMC in comparison with a cohort of samples from 60 OSCC patients in treated in the same hospital. Multiplexed Immunofluorescence Hybridization Chain Reaction analyses showed high infiltration by CD68+ cells and the absence of CD206+ macrophages near to the tumor invasive areas. Conventional immunostaining was performed for collagen IV which is the most prevalent type of collagen in the ECM and the main barrier against extravasation and tissue invasion by tumor cells, the analyses showed a mostly negative immunoreactivity for Collagen IV (93.4 % of the sample area).(3)

Conclusion: High levels of GALR2, considered an oncogene and associated to perineural invasion in OSCC, with concomitant increased expression of FOXP3, and low collagen IV immunoreactivity in the primary tumor indicated a poor prognosis and could be correlated to the development of cutaneous metastasis.(4)

Keywords: Oral squamous cell carcinoma; Cutaneous metastasis

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SGPP number: Not applicable.

CAAE: Not applicable.

Research funding: No financial support.

Presentation Abstracts

037

Rhabdomyosarcoma of the head and neck in an adult - case report and literature review

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ABSTRACT

Introduction: Sarcomas are rare mesenchymal malignant neoplasms comprising less than 1% of diagnosed cancers in the US and about 1% of head and neck cancers in adults. Over 50% of head and neck malignant tumors in children are soft tissue sarcomas and lymphomas. The rhabdomyosarcoma, a skeletal muscle subtype, is the most common soft tissue sarcoma in children comprising about 50% of these tumors.(1) In contrast, adult rhabdomyosarcomas comprise less than 10% of all soft tissue sarcomas. Its incidence is 3.5% in children aged 0 to 14 years, and 2% in teenagers aged 15 to 19 years. The tumor head and neck subsites include the orbit, parameningeal sites (nasopharynx, nasal cavity, paranasal sinuses, temporal bone, pterygopalatine fossa, and the infratemporal fossa), and non-parameningeal sites. Tumors that invade the orbit only have a better prognosis.(2) Subtypes may be histologically classified as: embryonic, alveolar, or pleomorphic. In children, about 60% are embryonic tumors, 20% are alveolar tumors, 15% are not classified, and 5% are pleomorphic tumors. The embryonic subtype has a better prognosis in children, but is more aggressive in adults. The alveolar subtype has a poor outcome because of its propensity to metastasize at a distance. The pleomorphic subtype occurs predominantly in adults. The majority of rhabdomyosarcoma cases occurs randomly, with no risk factors, although a small proportion of these tumors are associated with genetic conditions. The diagnosis should include a complete medical history, a physical examination, a complete blood count, the blood chemistry profile including liver enzymes, nasal endoscopy, computed tomography (CT), magnetic resonance imaging (MRI) and a biopsy for pathology. Signs and symptoms depend on tumor location. Sometimes the tumor may not be detected in the physical examination, but may become apparent because of pain or functional disorders. Treatment should be individualized for each patient. Survival in patients with head and neck rhabdomyosarcomas has increased with multidisciplinary therapy, which comprises chemotherapy, surgery, and radiotherapy. Patients with recurring rhabdomyosarcomas have a worse prognosis. The choice of therapy is based on several factors such as the site of recurrence or prior therapy.

Case report: The present report is of a male patient, 67 years old. History of pain in the right hemiface region for 4 months, with right unilateral nasal bleeding and ipsilateral nasal obstruction. He underwent a CT scan of the face, biopsy and blood tests. After the diagnosis of Rhabdomyosarcoma in the nasopharynx, a complete resection was chosen, with an extended total maxillectomy with exenteration of the right morbidity. The patient evolved satisfactorily post-operatively and subsequently underwent radiotherapy and complementary chemotherapy.(3) Head and neck rhabdomyosarcomas often present non-specific symptoms. Consequently, delays in the diagnosis and therapy occur in many cases, especially in parameningeal tumors.

Conclusion: Individualized multimodal therapy is needed for these patients; it depends on the tumor size and site, the histological subtype, local invasion, and distance metastases. Surgery should be done as the first treatment if it causes no functional or esthetic harm, followed by systemic chemotherapy.[4]

Keywords: Rhabdomyosarcoma; Head and neck neoplasms

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Presentation Abstracts

038

Analysis of the epidemiological profile of patients with juvenile recurrent parotitis treated with sialendoscopy

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ABSTRACT

Introduction: Juvenile recurrent parotitis (JRP) is a rare salivary gland disease characterized as a recurrent unilateral or bilateral parotid inflammation of a non-obstructive and non-suppurative nature in children and adolescents.(1) Juvenile recurrent parotitis occurs between 3 to 6 years of age with approximately 2:1 male predominance.(2) It is defined when a minimum of 2 episodes per year to 2 times in 6 months, furthermore the interval between acute episodes is variable, averaging 15 days to 2 months.(2) As a result of the parotid inflammation symptoms may appear associated with fever, swelling of the affected gland, and erythema of the overlying skin.(2) The parotid duct presents a dilated orifice and is usually surrounded by yellow plaques.(3) This disorder is felt to be multifactorial in nature and some possible etiologies have been proposed: genetic factors such as congenital ductal abnormalities, viral and bacterial infections, immune deficiency, allergies, and modification of the composition of saliva.(2,3)

Objective: Evaluation of the epidemiological profile of patients treated for Juvenile Recurrent Parotitis by Sialendoscopy.

Methods: Systematic review in Pubmed database, according to the PRISMA study selection flowchart. When searching for articles in the Pubmed database with the descriptor JRP, 125 articles were found. Of these, 43 were selected by title and abstract, of which 31 were selected in full to compose the study in question. From 31 selected, 3 with the greater amount of information were used to compose this systematic review.

Results: When observing the 3 studies in question, 100 children (60 boys, 40 girls) from ages 1 to 18 years old were treated during the study period, with a ratio of 3:2 male predominance. The average age at symptom onset was 4.9 years.

Conclusion: Sialendoscopy for JRP should be the first approach as it is a safe and effective modality with low morbidity and fewer complications for management of JRP.(1) To summarize, it allows avoiding prolonged antibiotic and anti-inflammatory drug treatment, and open surgery with its need for hospitalization.(2) Because of these benefits, sialendoscopy has now become fully integrated as the preferred treatment modality in pediatric practice for children with recurrent sialadenitis.(2)

Keywords: Parotitis, juvenile recurrent; Sialendoscopy; Salivary gland diseases

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Presentation Abstracts

CONTENTS

039

Metastasis of kidney carcinoma to the thyroid a decade after resection of the primary tumor

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ABSTRACT

Introduction: A metastatic neoplasm to the thyroid gland identified during life is a distinctly uncommon cause of thyroid enlargement. Usually, metastases are found at autopsy as part of widespread disease or they directly invade the thyroid gland from a neoplasm from adjacent organs such as the neck and/or mediastinum.(1) Although secondary involvement of the thyroid gland by renal cell carcinoma (RCC) is rare, it is still one of the more common neoplasms to metastasize to the thyroid gland (0.1%). When present, metastatic RCC can mimic primary thyroid gland neoplasms, potentially leading to diagnostic difficulties.(1) This diagnostic dilemma is further complicated by several factors. These include its presence as a solitary mass in the thyroid gland (most often a solitary mass lesion of the thyroid gland is representative of a primary thyroid lesion) and it's occurrence in patients with no known history of anRCC (*i.e.*, occult primary neoplasm) with the meta-static deposits in the thyroid gland representing the initial manifestation of their renal disease.(2)

Case report: In the present report, we report the case of a 74-year-old female patient presenting with a single nodule in the right thyroid lobe and mild compressive symptoms. The reported patient had preserved thyroid function and fine needle aspiration compatible with poorly differentiated carcinoma. The patient underwent total thyroidectomy, without intraoperative or postoperative complications. In pathological analysis and immunohistochemistry, the presence of metastasis due to clear cell carcinoma was determined. The patient underwent previous treatment for renal carcinoma a decade before the current event.

Conclusion: Metastasis to the thyroid gland is an uncommon occurrence. However, autopsy results show that 1.9-22.4% of patients with generalized malignancies have metastasis to the thyroid gland. However, when a thyroid mass presents as the clinical manifestation of metastatic disease, RCC seems to be the most frequent tumor type. In the absence of a clinical history, the sudden enlargement of the thyroid gland in an otherwise healthy patient makes the diagnosis of metastatic disease challenging. This is compounded further by histologic similarities between metastatic deposits and primary thyroid lesions. RCCs are neoplasms of adulthood that are seen most frequently in the sixth decade of life with a male predominance. In summary, identification of a clear cell tumor of the thyroid gland should be evaluated to exclude the possibility of metastatic RCC. This is especially true when found in a patient with a prior history of TCC, regardless of the temporal sequence of the prior RCC.

The course of RCC is unpredictable and thyroid damage may represent the only manifestation of the disease. Surgical treatment of solitary metastatic deposit is recommended as the patient can enjoy prolonged survival. Surgery is even more beneficial if RCC was known before metastasis, as determined in reviews of historical series.(3)

Keywords: Kidney neoplasms; Neoplasm metastasis; Thyroid neoplasms

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Presentation Abstracts

CONTENTS

040

Analysis of multimodal intraoperative neurophysiological monitoring using transcranial electrical stimulation of the vagus nerve in thyroid surgeries

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ABSTRACT

Introduction: Intraoperative neuromonitoring (IONM) of the recurrent laryngeal nerve (RLN) in thyroid surgeries assists in the identification, dissection, and evaluation of nerve integrity. In 2011, the International Intraoperative Monitoring Study Group published the first international guidelines to standardize the technical aspects and interpretation of RLN monitoring.(1) However, these guidelines focus on triggered electromyography (EMG) of the vagus nerve and RLN, excluding other monitoring modalities. Multimodal IONM, which associates different monitoring techniques, is widely recommended for preserving neurological structures.(2) Other modalities include motor evoked potentials (MEPs) obtained by transcranial electrical stimulation (TES) and spontaneous electromyography. Studies by Ichino et al.(3) demonstrated that vagal MEPs induced by TES could be obtained with high success during thyroid surgeries and may reflect RLN postoperative functionality. Yet, there are no studies evaluating how multimodal IONM impacts postoperative vocal cord paralysis (VCP) or the predictive value of MEP parameters for vocal cord function.

Objective: To analyze the impact of multimodal IONM on postoperative VCP in patients undergoing thyroid surgeries from 2018 to 2023 at a teaching hospital and investigate electrophysiological findings of MEPs obtained by TES of the vagus nerve.

Methods: This retrospective cohort study involved patients from the Thyroid and Parathyroid Surgery outpatient clinic at the *Hospital das Clínicas*, *Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo*. Individuals who underwent thyroidectomy and/or central compartment neck dissection with and without IONM were included. Exclusion criteria were individuals without perioperative laryngoscopy and those with postoperative drained hematomas. Intraoperative neuromonitoring procedures were performed by the same neurologist using a multimodal technique: MEP by TES of the vagus nerve, spontaneous electromyography, and probe-triggered electromyography by the surgeon. Monitored surgeries were performed under general anesthesia without long-acting muscle relaxants. Recording electrodes were attached to the endotracheal tube positioned at the level of the vocal cords. Figure 1 illustrates the equipment used for intraoperative neuromonitoring of the recurrent laryngeal nerve. Motor evoked potentials were obtained using standardized electrical stimulation (3 pulses at 2-millisecond intervals). Stimulus intensity was set to achieve a supramaximal response, typically 300-400V. Motor evoked potentials parameters (morphology, latency, amplitude) were assessed pre-incision and during closure. Comparisons were made between surgeries with and without IONM regarding clinical-surgical variables and postoperative VCP. At-risk nerves were analyzed for factors associated with postoperative paralysis using binary logistic

regression. Electrophysiological parameters of MEPs were compared between nerves with and without postoperative VCP.

Results: A total of 285 surgeries were analyzed - 200 without IONM and 85 with IONM. The groups differed in surgery profiles. Postoperative VCP rates were 19.9% in the non-IONM group and 23.3% in the IONM group (p=0.544). Three cases of bilateral paralysis occurred in the non-IONM group and none in the IONM group. Multivariate analysis showed thyroiditis and central compartment neck dissection were associated with higher risks of postoperative VCP, with odds ratios of 2.261 (95%CI=1.182-4.326) and 2.646 (95%CI=1.275-5.494), respectively. Multimodal IONM was not associated with a lower risk of VCP. In nerves with normal function, mean initial and final amplitudes were 264μV and 249μV, with median initial and final latencies of 10.32ms and 10.49ms. No significant differences were found based on side, sex, age, or surgery type. In nerves with postoperative VCP, mean final amplitude was 259μV, and median final latency was 9.48ms. Morphological changes in MEPs were seen in 50% of these nerves. No significant differences were observed between initial and final parameters in both groups.

Conclusion: Multimodal IONM did not significantly reduce the risk of VCP. However, no bilateral paralysis was observed in the IONM group. Thyroiditis and central compartment neck dissection were associated with increased VCP risk. Quantitative MEP parameters with vagal TES were not useful in predicting postoperative VCP, with frequent false negatives.

Keywords: Thyroidectomy; Intraoperative neurophysiological monitoring; Recurrent laryngeal nerve injuries; Vocal cord paralysis; Motor evoked potentials; Transcutaneous electric nerve stimulation

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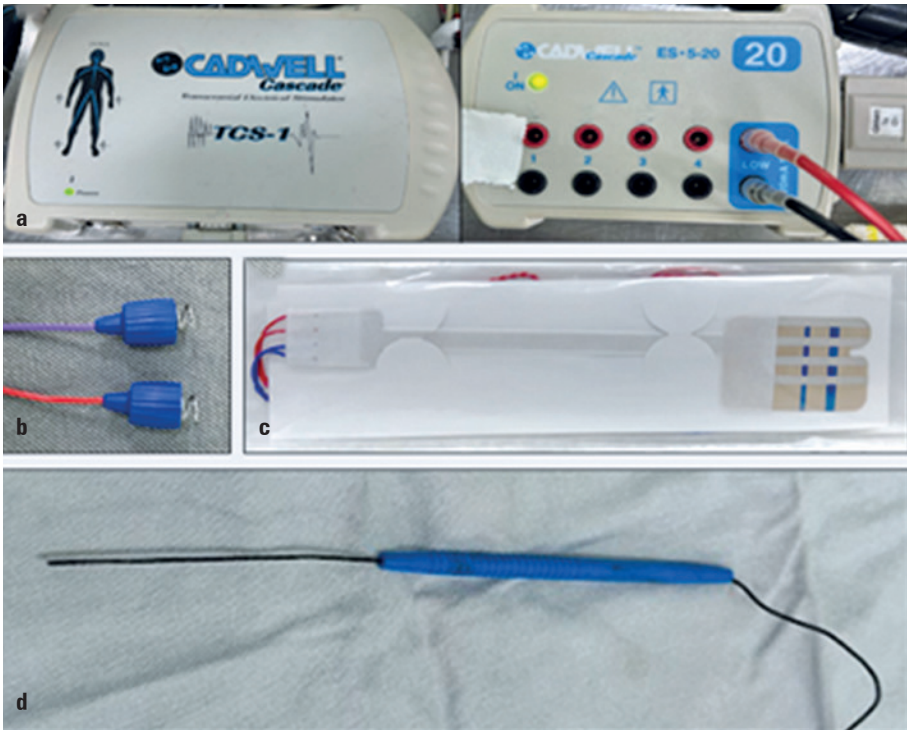

Caption: (a) Cadwell® 32-channel Intraoperative Neuromonitoring and Clinical Diagnostic System; (b) corkscrew-type electrodes positioned on the scalp (positions C1-C3' and C2-C4') for transcranial electrical stimulation; (c) adhesive type laryngeal electrode with two channels (Dragonfly Laryngeal Electrode® - ©Spes Medica S.p.A - Italy) for use attached to an endotracheal tube; (d) electrode- probe for direct stimulation of the recurrent laryngeal nerve in the surgical field.

Figure 1. Equipment used for surgeries with intraoperative neuromonitoring of the recurrent laryngeal nerve

Presentation Abstracts

CONTENTS

041

Plexiform neurofibroma cervical-thoracic

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ABSTRACT

Introduction: Nerve sheath tumors are tumors derived from the neural crest, therefore having a neuroectodermal origin. They can be divided into neurofibroma, shwannoma and neurogenic sarcoma. Neurofibromas are benign, non-encapsulated tumors that present all elements of the nerve. Nerve sheath tumors can affect any nerve that has a myelin sheath, being more common in the extremities and trunk, and rarely occurring in the cervical region. In the head and neck region, they can occur from the cranial nerves, particularly the vagus, brachial plexus or even small nerve threads. Computed tomography and magnetic resonance are the methods demonstrating injuries of different aspects. Areas of cystic degeneration are common in schwannomas, while neurofibromas, especially small ones, are generally homogeneous.(1) About a third of tumors are hypervascular and those originating from spinal nerve roots may have a dumbbell appearance, with cervical components and components within the spinal canal.

Case report: We describe a case of isolated plexiform neurofibroma presented with a history of dyspnea, dysphagia and symptoms of superior cava syndrome in a 60-year-old female patient. Initial diagnosis through cervical biopsy and confirmation with histopathological examination and immunohistochemistry. The case mentioned above was staged and no initial surgical approach was indicated due to neck-thoracic extension and involvement of the pulmonary artery and right main bronchus. Thus, the patient continued for non-surgical treatment with chemotherapy.(2) Associated radiotherapy approach is contraindicated due to the position and extent of the neoplasia.

Conclusion: Although the majority of these tumors are benign, the literature cites a risk of malignancy ranging from 4 to 12%. Surgery is the only effective option available for the treatment of plexiform neurofibromatosis, however, the success of surgical intervention is limited due to the infiltrative nature of the lesion, resulting in a high rate of tumor recurrence.(3) Furthermore, the difficulty in identifying the main nerve plexus during surgery increases the risk of morbidity and neurological sequelae in the postoperative period.

Keywords: Neurofibroma; Neurofibromatoses

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042

Use of Pezzer catheter in neopharynx reconstruction in total laryngectomies

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ABSTRACT

Objective: To report the experience of using the Pezzer catheter in total laryngectomy to reduce the incidence of PCF.

Case report: A 59-year-old male patient, hypertensive and a former smoker, diagnosed with stage T4aN0M0 - IV laryngeal SCC, underwent total laryngectomy, bilateral cervical dissection levels II-IV and VI, and total thyroidectomy in May 2024. For neopharynx reconstruction with remaining tissue, we opted to use the Pezzer catheter as a salivary bypass, guiding its tunneling (Figure 1). The Pezzer catheter has a mushroom-shaped distal tip; we cut the apex of the catheter's mushroom tip, leaving it open to serve as a larger diameter contact area, which will be fixed to the base of the tongue. We measured 4cm beyond the longitudinal defect of the neopharynx and defined the final size of the prosthesis. In this case, we used a size 32 catheter. To fix the upper part of the prosthesis to the base of the tongue, we performed a transfixing stitch between the skin of the anterior cervical region, the prosthesis, the base of the tongue, and the skin again. The distal part of the prosthesis is positioned in the esophageal ostium and the nasoenteral tube is passed inside the prosthesis. We then initiated the primary closure of the neopharynx, first closing the transverse defect and then the longitudinal defect with simple interrupted sutures. The patient was discharged on the 7th postoperative day after a methylene blue test, with no evidence of fistulas or complications, and the prosthesis and nasoenteral tube were removed in an outpatient consultation on the 15th postoperative day.

Methods: Retrospective analysis of medical records in the TASY system of ICESP and literature review on the PubMed platform with the keywords: Pezzer catheter, laryngectomy, pharyngocutaneous fistula, salivary bypass tube.

Literature review: Laryngeal cancer represents approximately one-third of head and neck cancers, being a significant source of morbidity and mortality.[1] Postoperative complications in total laryngectomies, whether primary or salvage, have a significant impact on both perioperative and oncological outcomes. The most important ones that deserve to be highlighted are pharyngocutaneous fistulas (PCF), with a global incidence of approximately 15%, reaching up to 30% in salvage surgeries.[2] To reduce these negative impacts and improve patient prognosis, some alternatives are proposed, including the use of catheters or tubes to guide the saliva's pathway, preventing it from passing through the suture line, thereby reducing the incidence

or at least guiding the pathway of a possible fistula, and improving postoperative healing. One option in this case is the Pezzer catheter.[2,3] Case reports and randomized trials highlight the benefits of using salivary bypass tubes (SBT) in patients undergoing total laryngectomy. A systematic review and meta-analysis published in 2022 concluded that using SBTs can be useful for maintaining the patency of the neopharynx, avoiding excessive scar tissue formation that could lead to late stenosis.[2] Additionally, another study from 2021 showed a general trend of lower fistula rates with the use of SBTs.[4] Finally, it was also seen that this is a resource that has good patient tolerability and little or no complication in its use.[5] Despite the studies mentioned above, it is still necessary to better detail the patient profile that would benefit most from its application, the duration of use, the ideal time for removal, and the period for starting oral feeding. Thus, it is a relevant topic to be explored given the identified benefits of its use and the ongoing challenge that PCF management poses for surgeons.

Conclusion: It was possible to conclude that the use of SBTs, such as the Pezzer catheter, proves to be a viable and cost-effective alternative to improve perioperative outcomes in laryngectomized patients. It is a low-cost material, with few technical alterations during the intraoperative procedure, easy to use, and a feasible option to be implemented in the routines of Head and Neck Surgery services.

Keywords: Laryngectomy; Pezzer catheter; Pharyngocutaneous fistula

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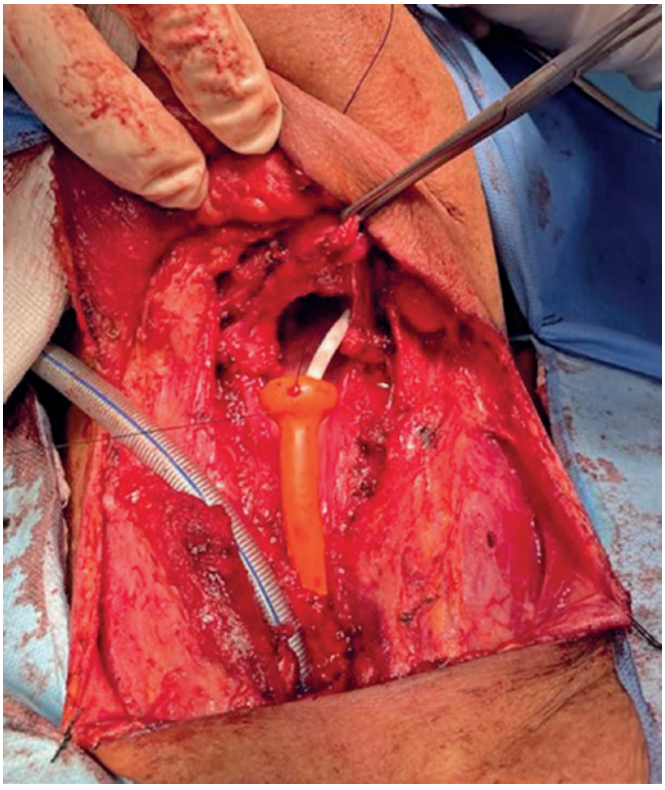

Figure 1. Pezzer catheter by guiding tunneling

043

Benefits of using carboxymethylcellulose and vegetable polysaccharide (Adhesion®) in head and neck surgery

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ABSTRACT

Introduction: Head and neck surgery causes consequences in places that are difficult to hide by clothing or accessories, with a significant impact on quality of life, especially in the social domain. Skin adhesions, scar retractions, synechiae, limitation of movement and unsatisfactory scars are examples of these sequelae and are related to exacerbated fibrosis during the healing process. Several techniques have been used to treat postoperative fibrosis in the craniocervical segment, however, unfortunately, the results are limited and unsatisfactory. Adhesion® - Carboxymethylcellulose and vegetable polysaccharide is a biocompatible sealing, hemostatic and anti-adhesion agent developed for intraoperative application in the surgical bed. It has been used to reduce adhesions in abdominal surgery with positive results, however, there is still no evidence demonstrating its effectiveness in head and neck surgery.

Objectives: This study's main objective is to evaluate whether the use of carboxymethylcellulose and vegetable polysaccharide (ADHESION®) in thyroid surgery reduces drain output.

Methods: Longitudinal observational cohort study with patients undergoing thyroid surgery at the Head and Neck Surgery Area of the *Irmandade da Santa Casa de Misericórdia de São Paulo*. Inclusion criteria: patients undergoing thyroid surgery with the application of ADHESION® to the surgical bed intraoperatively. Exclusion criteria: rescue surgeries; urgent/emergency surgeries; surgeries to treat post-operative complications and surgeries with palliative intent. Sampling will be for convenience of patients with surgical indication being followed up at the outpatient clinic of that service. All recruited patients were informed about the objectives and information relevant to the study and only those who voluntarily agreed to participate were included by signing the informed consent form. Demographic, anthropometric and drain output data were collected. The evaluators were blinded to the objectives of the study and the use of ADHESION® intraoperatively. Data collection and management were carried out by REDCap.

Results: Adhesion® was used in 22 thyroid surgeries, 21 of which were women and 1 was a man. Ages ranged from 16 to 78 years old, with the average age being 51.35 years old. Of the surgeries studied, X surgeries were benign and Y were malignant. Among the patients, 16 were drained and 6 were not drained. Of the surgeries that were drained, patients were discharged between the first and second post-operative day, with an

average hospital stay of 1.5 days. Of the patients who were drained, the daily drain volume ranged from 5 to 115mL, with an average of 39.75mL, with the drain being removed on the second postoperative day for all patients.

Conclusion: Among the patients studied, no postoperative complications were observed, such as hematomas or seromas. Therefore, all patients who used Adhesion® did not experience postoperative complications.

Keywords: Adhesion®, Thyroid surgery

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Presentation Abstracts

044

Rehabilitation after supracricoid partial laryngectomy: cohort study

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ABSTRACT

Introduction: Supracricoid partial laryngectomy (SCPL) was first described in 1959 by Majer and Rieder for the treatment of laryngeal carcinoma, but only in the 1990s Laccourreye and collaborators spread its use for the treatment of glottic cancer throughout Europe.(1) Among the vantages, the oncological results are encouraging, with an average overall survival around 79.7% when compared to total laryngectomy[4]. Efforts are being made to identify the impact of this surgery on patients' quality of life.(2,3)

Objectives: To evaluate vocal, swallowing and respiratory rehabilitation of patients undergoing supracricoid laryngectomy; evaluate the impact of voice changes and global quality of life.

Methods: it is a prospective cohort study and for voice assessment, maximum phonation time in seconds where used, and patients also responded the Vocal Handicap Index-10 questionnaire on self-perception of vocal quality. Voices were classified using the GRBASI Scale. To evaluate swallowing rehabilitation, patients underwent nasofibroscopy. Patients who removed tracheostomy were considered rehabilitated from a respiratory point of view. Quality of life was assessed using EORTC QLQ-C30 and H&N35 questionnaires.

Results: A total of 31 patients were included in the study. 70.4% of patients were T3. In 80.6% one arytenoid was preserved. Preservation of the epiglottis was possible in 77.4%. In swallowing assessment, two patients (6.4%) were considered non-rehabilitated. Ten patients (32.2%) were considered partially rehabilitated and 19 (61.3%) fully rehabilitated. Salivary stasis was presented in 54.8% of all cases. Sensitivity was abnormal at 74.2%. Penetration occurred in 58.1% of patients with 29% experiencing aspiration. In voice assessment, the maximum phonation time was 4.20 seconds. Nineteen (61.3%) patients were considered rehabilitated. All patients had a moderate to severe degree of vocal disability and 77.41% had a calculated voice handicap index considered abnormal. When assessing breathing, eight patients (25.8%) were considered non-rehabilitated. Disease-free survival was 87.1% in follow-up of 5.77 years. When subjected to specific exams and evaluations, only 38.7% were completely rehabilitated. When comparing results of EORTC-C30 and H&N35 questionnaires with the reference values, global score and domain scores are better on the patients of the study, as well as some of the symptoms.

Conclusion: Partial supracricoid laryngectomy remains a good option for patients with laryngeal tumors, with a survival rate around 90%, and good rehabilitation rates, providing a good quality of life for these patients.

Keywords: Supracricoid partial laryngectomy; Rehabilitation

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Presentation Abstracts

Award 1st place

045

Prediction model of death for patients with HPV unrelated head and neck squamous cell carcinoma using logistic regression and machine learning techniques - can we do better than TNM?

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ABSTRACT

Introduction: Head and neck squamous cell carcinoma (HNSCC) is a significant global health concern with over 890,000 cases and 455,000 deaths annually.(1) The majority of new cases are diagnosed at stages III or IV, leading to around 300,000 deaths yearly, with half of the locally advanced patients experiencing recurrence within two years post-treatment.(2,3) The disease's complex etiology and varied outcomes create challenges in diagnosis, prognosis, and treatment. Rising HNSCC incidence, especially in developing nations, is linked to tobacco, alcohol, and HPV infection.(3,4) Tailored management approaches are crucial due to the TNM system's limitations in predicting patient outcomes accurately. Advanced statistical methods like artificial neural networks and logistic regression (LR) offer improved prognostic assessments compared to the TNM system.(5,6) This study aims to introduce a more precise prediction model than the TNM system, aiding in survival estimation for HNSCC patients at diagnosis, and offering individualized prognostic insights.

Objective: To create a 5-year mortality prediction model to be applied at the first clinical presentation, that is superior to TNM in terms of prediction and discrimination, and that could also predict individualized prognosis.

Methods: A retrospective study of data prospectively collected data from 1797 previously untreated HNSCC patients between July 2000 and August 2011 by the GENCAPO study group. The study obtained patient information at the initial diagnosis, covering demographics, lifestyle factors, symptoms, tumor characteristics, staging information, and more. The outcome of interest was overall mortality within five years. Data mining using decision trees was applied to determine important variables for a prediction model. The model's performance was evaluated using various metrics such as accuracy, sensitivity, specificity, and area under the curve (AUC). Subsequently, a LR model was developed to estimate the mortality risk five years post-diagnosis, assessed for discrimination and calibration using the ROC curve and goodness-of-fit method.(7) The results were segregated into quartiles to discern survival probabilities, comparing them with TNM staging via Kaplan-Meier analysis.

Results: A total of 1,797 patients were analyzed. After data mining using Decision trees, 6 of 28 predict variables were pre-chosen. We used the forward stepwise max validation r-square as the stopping rule of the model building, and all six variables selected by the data mining were included in the final model. The predictive

variables were tumor volume, sex, age, weight loss, degree of tumor differentiation and lymph node enlargement (Table 1). All these variables were highly significant predictors of overall survival regardless of the primary tumor site. Once the LR equation was developed to estimate the probability of surviving or dying 5 years from the first appointment, we tested the model's discrimination using AUC (0.76) and this model showed good calibration. The figure 1 shows the five-year survival curves of the constructed model and TNM staging, respectively.

Conclusion: The study focused on improving prediction models for cancer patient prognosis, emphasizing the necessity for accurate survival estimates to guide treatment decisions. Beyond the limitations of the traditional TNM system, data mining techniques were employed to develop predictive models based on various demographic and clinical factors. By taking a holistic approach to all head and neck cancer, a successful and robust predictive model was developed, demonstrating good discrimination and calibration regardless of tumor site. Factors such as tumor volume in head and neck squamous cell carcinoma (HNSCC) and lymph node metastases were identified as crucial predictors of mortality, showcasing the importance of comprehensive data analysis. Additionally, variables like patient gender and age were found to significantly impact mortality risk, underscoring the relevance of social determinants in cancer prognosis alongside anatomical factors. Thanks to machine learning techniques associated with LR, it was possible to develop a multivariate logistic model with good discrimination and calibration to predict 5-year survival, with easy-to-retrieve information, which was superior to the TNM.

Keywords: Head and neck neoplasms, Data mining, Prediction, Survival Analyses, Prognosis

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CAAE: Not applicable.

Research funding: No financial support.

Table 1. List of the predictive variables

Predictor	OR	Lower 95%	Upper 95%	p value
Age	1.03	1.02	1.05	<0.0001
Sex	2.37	1.48	3.81	0.0003
Weight loss	1.50	1.00	2.27	0.0479
Clinical volume	1.90	1.30	2.80	0.001
Lymph node involvement	1.96	1.39	2.76	0.0001
Degree of differentiation	2.05	1.10	3.96	0.0235

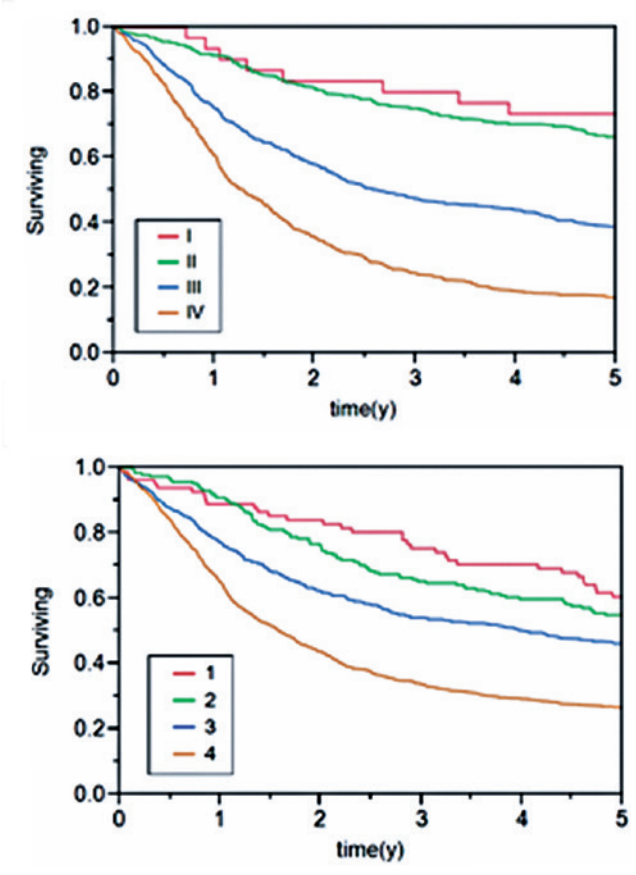

Figure 1. Survival Plots: Logistic Model (left) *vs* TNM Staging (right)

046

Case report: a rare case of solitary fibrous tumor in the buccal space

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ABSTRACT

Introduction: Solitary fibrous tumor (SFT) is a rare benign neoplasm composed of spindle-shaped cells of mesenchymal origin, initially described in the pleura since 1931. Other extra-pleural sites have been described since then and head and neck SFTs account for a quarter of extra-pleural sites, which, in turn, represent a quarter of all SFTs.

Objective: The present study describes the clinicopathological findings of a rare case of SFT in the buccal space, in which surgery was performed at our institute.

Case report: A previously healthy 31-year-old woman presented with a 6 months history of a mass in left face-parotid gland region, with a slowly increasing in size. There was no history of trauma. On physical exam, there was an approximately 2.5cm palpable, fibroelastic, mobile mass on the left masseteric region of the face. There was mild pain in the area and no nerve paralysis or paresthesia. There was no constitutional symptoms (weight loss, fever, chills, night sweating). She had no comorbidities known and had never smoked. A computed tomography scan of the head and neck revealed a nodular well defined, heterogeneously enhancing 2.2cm mass in the left buccal space in contiguity with the anterior surface of left masseter muscle. A magnetic resonance Imaging (MRI) showed a solid-cistic, heterogeneous, well defined 2.4cm mass located between the masseter and zygomatic muscles, inseparable from the parotid duct, without its dilation. A transoral resection of the mass was performed without complications. There was no nerve lesions. The nodule resected measured 2.0x1.9cm. The immunohistochemistry showed a positivity to CD34 and CD99, but were negative to CD31, S100, p63, actin 1 to 4, calponin, CD21, desmin, AE1/AE3. A percentage of 95% of cells with a signal pattern indicating the absence of EWSR1 gene rearrangement was observed. Thus, the conclusion was solitary fibrous tumor. At last follow-up (7 months after surgery), the patient is without complications and disease free.

Conclusion: The differential diagnosis of SFT should be considered in well-circumscribed masses in the oral cavity and buccal space. The treatment of choice consists of surgical removal, ideally with free margins. Recurrence after surgery is usually rare. The clinical behavior of these tumors usually presents intermediate aggressiveness, with the presence of rare variants of malignant and aggressive behavior described in the literature.

Keywords: Head and neck neoplasms; Solitary fibrous tumor; Buccal space

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047

Challenges of laryngeal cancer: the importance of differential diagnosis

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ABSTRACT

Introduction: The prevalence of laryngeal cancer is notable in many developing countries, where the challenges for an accurate diagnosis can be significant. In Brazil, laryngeal cancer is the eighth most common cancer in men and the tenth in terms of mortality, according to statistics released by *Instituto Nacional de Câncer* (INCA) in 2023.[1]

Objective: This study presents the experience of attending three patients in our private clinic over a period of 4 months in the year 2024, with suspected laryngeal cancer, highlighting the importance of differential diagnosis. Among these patients, one was diagnosed with laryngeal cancer, while the others were diagnosed with laryngeal blastomycosis and laryngeal tuberculosis.[2,3]

Methods: The evaluation of each patient included a detailed anamnesis, physical examination, and complementary exams such as nasofibrolaryngoscopy, biopsy, imaging studies, and serological tests, providing a careful and optimized diagnostic approach.

Results: Case 1 - Patient A.F.M, 35 years old, male, moderate alcohol drinker, with a 25 pack-year smoking history, without allergies or comorbidities, and no relevant family history. He reports an 8-year history of episodes of cough, pain, and dysphonia. He was previously hospitalized without a defined diagnosis. He has had various episodes of improvement and worsening, and 15 days before, there was a significant worsening of dysphagia. Nasofibrolaryngoscopy performed in the office showed an extensive lesion in the larynx (Figure 1A). Laboratory tests and a chest CT scan were requested. With the CT scan highly suggestive of tuberculosis, appropriate treatment was initiated.

Case 2 - Patient D.L.L., 58 years old, female, with significant daily alcohol consumption, over 20 pack-year smoking history, and COPD with pulmonary emphysema. Denies surgical history, allergies, or significant family history. Complains of a lump in the throat and pain when swallowing. Also reports otalgia. She had already seen a specialist 4 months ago, but her larynx was not examined. Nasofibrolaryngoscopy revealed a laryngeal lesion (Figure 1B). Laboratory tests and a chest X-ray were requested. Laboratory tests were positive for paracoccidioidomycosis with a 1:256 titer. Treatment with itraconazole was initiated. The patient was re-evaluated after one month, showing complete improvement of the lesion, but developed drug-induced dermatitis, leading to topical and oral treatment and a change of medication for blastomycosis.

Case 3 - Patient N.R.S., 60 years old, male, significant alcohol consumption, 40 pack-year smoking history, no comorbidities, and a history of abdominal wall hernia surgery. No significant family history. He reports throat pain for 3 months, associated with foul breath and nausea. Cough and right ear pain. No improvement with antibiotics prescribed in another service. Nasofibrolaryngoscopy revealed a vegetative lesion on the right laryngeal face of the epiglottis (Figure 1C). He underwent direct laryngoscopy with biopsy, confirming moderately differentiated squamous cell carcinoma, cT2N0. Transoral surgery with diode laser and bilateral cervical lymphadenectomy was proposed.

Discussion: The three patients seen presented unfavorable socioeconomic conditions, with persistent symptoms for at least 3 months. Additionally, they had personal risk factors for neoplasia. All were referred for surgery based on clinical suspicion without a precise established diagnosis.

Our study highlighted the importance of precision medicine in diagnosing head and neck diseases, whether neoplastic or not.

Conclusion: The described experience highlights the critical need for accurate diagnoses in suspected cases of laryngeal cancer. While advanced therapeutic options are being developed, it is imperative that contexts in developing countries prioritize access to effective diagnostic tools and excellent training for healthcare professionals. Treatment suggestions without a precise diagnosis not only generate an emotional impact but can also lead to inadequate treatments with serious consequences for the patient's health.

Keywords: Laryngeal cancer; Differential diagnosis; Head and neck oncology; Tuberculosis; Blastomycosis; Carcinoma; Public health

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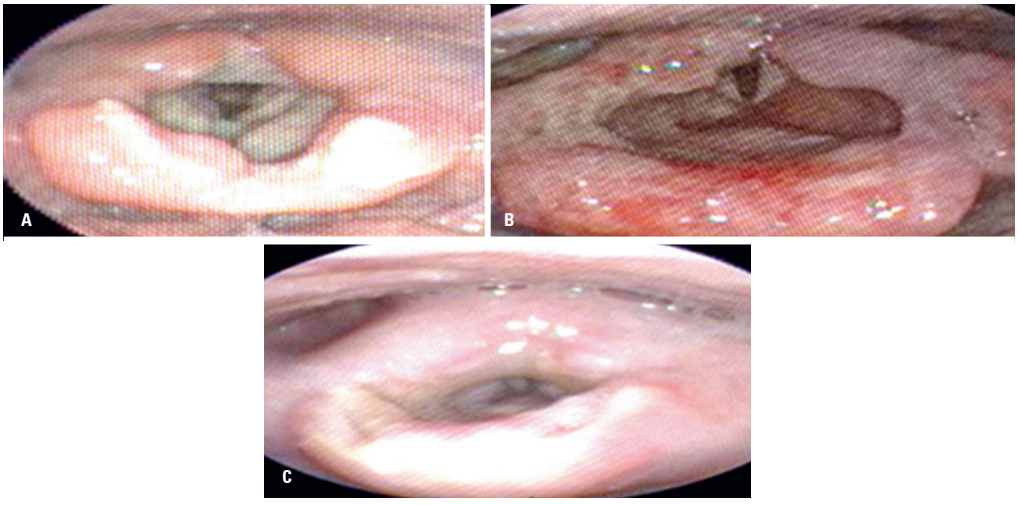

Figure 1. (A) Laryngeal tuberculosis lesion. (B) Laryngeal blastomycosis lesion. (C) Laryngeal carcinoma lesion

048

Case report: a IgG4-related orbital disease presenting with a large mass

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ABSTRACT

Introduction: IgG4-related disease (IgG4-RD) is a newly classified, imune-mediated process characterized by tissue infiltration by IgG4-positive plasma cells, wich leads to enlargement of the affected organ by lymph plasma cell infiltration, with sclerotic masses of various size. Any organ can be affected by IgG4-RD (synchronously or metachronously) and the orbital involvement is reasonably common. The diagnosis can be challenging. Oral steroid administration is the first-line therapy with a good treatment response. Alternative therapies include immunosuppressive drugs and rituximab. However, there is a high-recurrence rate and surgery may be considered in selected cases.

Objective: The present study describes the clinicopathological findings of a case of a large mass in orbit, in which surgery was performed at our institute.

Case report: A 64-year-old man presented with a large mass in the left orbital cavity that had grown progressively over 2 years, with loss of visual acuity 6 months after admission. He reported pain when manipulating the injury, with no other complaints. He had systemic arterial hypertension as a comorbidity controlled with the use of medication and was a former smoker with a smoking history of 3 pack-years, which he had stopped 19 years ago. He denied alcoholism. On physical examination, there was a fibroelastic and semi-fixed mass in the orbit the left, measuring approximately 8cm in largest diameter, which extended contiguosly to the apex of the nasal pyramid and the eyeball was not individualized. Magnetic resonance Imaging showed a large, expansive lesion with lobulated contours, with intra-conal and extra-conal components, without restriction to diffusion and extending from the apex of the orbital foramen, without intracranial invasion. The lesion was resected with exenteration of the left orbit and reconstruction with a left temporal muscle flap and a facial rotation flap. The resection product measured 8,3cm in the largest diameter, containing the eyebal measuring 3.5cm and a fibro-elastic, well-defined lesion measuring 7.5x4.4x4.1cm. The lesion was not related to the eyeball, the optic nerve or the skin and the resection margins were considered free of neoplasia. The immunohistochemistry demonstrated positivity for IgG (IgG4) and negativity for CD34, CD68, S100, RP, EMA and GFAP. Thus, the conclusion was IgG4-related orbital inflammatory disease. The patient had a good postoperative evolution and there was no need for additional therapy. At last follow-up (9 months after surgery), the patient is without complications and disease free and there were no signs of other organs involvement.

Conclusion: Despite the initial favorable response to steroids, patients with resectable IgG4-RD lesions in orbit should consider treatment with surgery because relapse rates may be lower after resection. Surgery is also considered in patients with single-organ involvement in whom there is high suspicion of malignancy and diagnosis is made after mass removal.

Keywords: Head and neck; IgG4; Orbit; IgG4-related disease

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049

Treatment of Parotid Hemangiomas in adults: A Case Report and Review of Literature

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ABSTRACT

Introduction: Hemangiomas are vascular anomalies characterized by the proliferation of endothelial cells and can be classified as cavernous, capillary, or mixed.(1) Despite parotid hemangioma being the main salivary gland tumor in childhood, its incidence in adults is rare (0.5-1%).(1-3) The growth of hemangiomas over the years can cause functional and aesthetic impairment to the patient, making its treatment a significant challenge, as it is a lesion with a high potential for bleeding and proximity to the facial nerve.(4) Some alternative therapies to surgical treatment are proposed in childhood, but little is known about the response of these tumors in adults.(5)

Case Report: Woman, 34 years old, with no relevant medical history, presents with intermittent swelling in the area adjacent to the right mandibular angle for 2 years, which worsens with acidic and citrus foods and mild pain. Upon examination, there was asymmetry of the right facial contour, but no palpable nodules were detected. A MRI with sialography reveal a partially defined lobulated formation in the tail of the parotid gland and with an intraparotid component in the superficial right lobe measuring approximately 3.3x3.1x2.6cm, predominantly showing T2 hypersignal and irregular enhancement after intravenous contrast administration, along with calcification/phleboliths within. The patient then underwent treatment with superselective embolization of branches of external carotid using a controlled-release coil the day before the surgical treatment and underwent superficial partial parotidectomy with neurophysiological monitoring of the facial nerve (Figure 1). Complete resection of the lesion was performed, preserving the nerve and its function, with the pathological examination confirming a parotid hemangioma.

Methods: A literature review was conducted using PubMed. The keywords "hemangioma," "parotid," "treatment," and "adult" were used. Articles from the mentioned database were analyzed with the aim of evaluating possible treatments for parotid hemangiomas in adults.

Discussion: The treatment of parotid hemangiomas primarily depends on the patient's age group, as spontaneous involution occurs pediatric patients by the age of 7, a phenomenon not observed in adult.(3) Surgical treatment with parotidectomy is considered the gold standard for parotid hemangiomas in adults, particularly for the cavernous subtype, which does not tend to undergo spontaneous regression.(1,2) Preoperative embolization has been utilized to reduce intraoperative bleeding and facilitate surgical resection, thereby reducing the risk of complications.(4,5) The risk of facial nerve injury is a concern, as its occurrence is higher compared to other pathologies.(1,2,4) Intraoperative neurophysiological monitoring aids in identifying the branches of the facial nerve.(4) Alternatives to surgical

treatment include systemic medication options such as corticosteroids, propranolol, and interferon-alpha, or corticosteroid infiltration.[2,5] Additionally, sclerosing agents have shown good responses in small lesions.[4]

Conclusion: Despite the good response to pharmacological treatment for hemangiomas reported in the pediatric population, there is no evidence of adequate response to this type of treatment in adults. Therefore, surgical treatment is preferred, with measures such as embolization and monitoring helping to reduce surgical morbidity.

Keywords: Hemangioma; Parotid tumor; Parotidectomy

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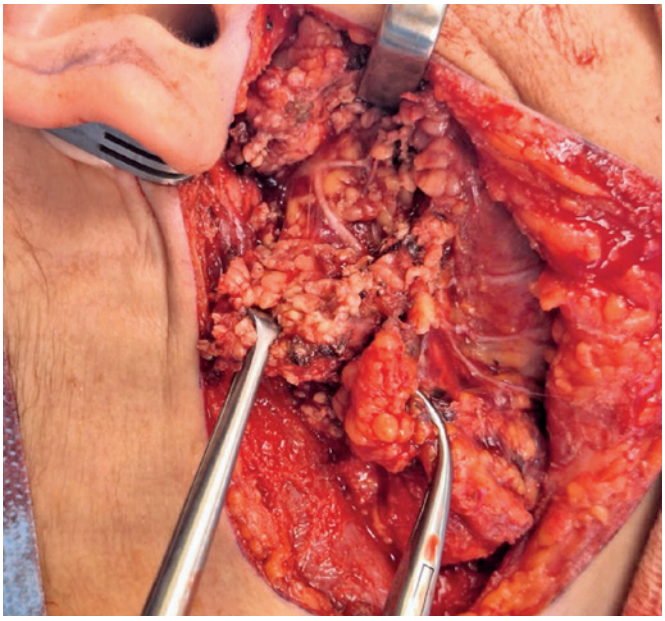

Figure 1. Intraoperative photographic record showing the caudal tumor lesion in the clamps and the dissection of the facial nerve trunk and marginal branch

050

The importance of simultaneous reconstruction in head and neck surgery

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ABSTRACT

Introduction: Patients with head and neck cancer present challenges in histological and topographical diagnosis, staging, and subsequent treatments. A multidisciplinary discussion is prudent to maximize survival and preserve function and aesthetics.(1) The diagnosis and treatment of head and neck neoplasms not only impact various physical and emotional aspects of the patient but also their aesthetics, speech, swallowing, and mastication. To minimize the impact of ablative surgery, appropriate simultaneous reconstruction is used.(2)

Objective: The objective of this study is to present a case treated without appropriate simultaneous reconstruction and to highlight its impact on the patient's life and subsequent difficulties.

Methods: To demonstrate the importance of simultaneous reconstruction at the time of tumor resection, we presented a case of a patient who experienced poor quality of life following inadequate reconstruction. The methodology used for this case study included a detailed review of the patient's medical history, surgical records, and follow-up assessments to highlight the impact of delayed reconstruction on postoperative outcomes and quality of life.

Case report: The patient underwent surgical intervention at another facility on March 30, 2023, involving resection of a tumor of the right retromolar trigone associated with a modified radical neck dissection. The histopathological examination revealed a moderately differentiated squamous cell carcinoma, measuring 5x5cm, with perineural, muscular, and angiolymphatic infiltration. There was focal deep margin involvement and bone margin involvement. Additionally, 3 out of 28 lymph nodes were affected. The incisions were primarily sutured, and a titanium plate was used between the remaining symphysis of the mandible and the mandibular ramus. As adjuvant treatment, the patient received both chemotherapy and radiotherapy. The patient presented to our service for reconstructive evaluation due to complaints of intra and extra-oral exposure of the reconstruction plate, inability to eat, social interaction difficulties, and feelings of shame. The patient exhibited trismus with an oral opening of approximately two fingers, and an exposed reconstruction plate approximately 6 cm in length at the topography of the lower right gingiva. There was also plate exposure in the skin of the mentum and the right TMJ region. All three areas showed purulent discharge. After restaging and confirming the absence of neoplasia, mandibular reconstruction with an osteomyocutaneous fibula flap was proposed.

Results: Before the surgical procedure, the patient was instructed to perform regular cleanings of the exposed and infected plate, both intra and extra orally. Antibiotic therapy guided by culture and antibiogram was initiated before surgery. Simultaneously with the removal of the plate and abundant cleaning of the surgical wound, the bony flap was placed to reconstruct the mandible, the skin to recreate the floor and lower gingiva, and a strip of the soleus muscle to cover the new plate and screws. The procedure demanded extra care due to previous surgical treatment, irradiation within less than a year,

and ongoing infection. There was a noted reduction in available arterial and venous vessels for anastomosis at the operated site. These factors contributed to a prolonged surgical time and a postoperative period with more complications than expected.

Conclusion: The use of a reconstruction plate without a bony flap often does not withstand masticatory forces, posing a high risk of extrusion and fracture over time, especially in patients who have undergone radiotherapy. Reconstruction solely with a plate is usually reserved for patients with significant comorbidities or those unable to tolerate extended anesthesia time.[3] In treating tumors affecting the mandibular symphysis, simultaneous reconstruction during surgical ablation of the cancer is typically performed, leading to a more easily executable surgery, shorter surgical time, lower cost, a single hospitalization, and more manageable complications. Moreover, the patient does not live months of their life without a mandible, avoiding the need for another procedure with additional technical difficulties, surgical time, and postoperative complications.

Keywords: Heand and neck cancer; Simultaneous reconstruction; Aesthetics; Quality of life; Mandibular reconstruction; Neoplasms

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051

Free tissue flaps for reconstructions of advanced oncological defects of the face: prospective and randomized study

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ABSTRACT

Introduction: Advanced oncological defects of the face (AODF) involve the structures of the face in a three-dimensional format, resulting in the communication of the upper aerodigestive tract, bones and facial soft tissues with the external environment.(1) The reconstructive microsurgery is the gold standard for rehabilitation of these defects, usually with vascularized fasciocutaneous and/or musculocutaneous free flaps. In the case of AODF, free flaps offer a better restoration of phonation and swallowing, resulting in increased quality of life and aesthetic satisfaction.(2) Despite the different classifications of AODF and the options for reconstruction, the type of free flap that promotes the best surgical and aesthetic results remains controversial.(3) Thus, we aimed to prospectively compare the results of AODF reconstructions with fasciocutaneous or musculocutaneous free flaps.

Methods: A prospective randomized study was conducted with patients allocated in a 1:1 ratio to each group at an oncology reference center. Patients without previous treatment or with recurrent advanced oncologic disease of both genders, aged over 14 years and submitted to reconstructive microsurgery for the treatment of AODF were included. The patients were divided into two groups: Group A - fasciocutaneous free flap (anterolateral thigh flap) and Group B - musculocutaneous free flap (vertical r*ectus abdominis* or *latissimus dorsi* flap). The groups were prospectively compared in terms of technical aspects of free flaps, morbidity in the donor site, nutritional status and postoperative aesthetic result. The results were expressed both as mean±standard deviation and as median and percentage. Fisher's exact test was used with a $p<0.05$ considered significant. The study was approved by an international IRB.

Results: Of the twenty-eight patients selected, 23 completed the study, 12 allocated to Group A and 11 allocated to Group B. The length of the vascular pedicle of the free flap was significantly greater in Group A ($p<0.001$), while the time of flap dissection was lower in Group B ($p=0.008$). The rate of major complications in the donor area of the musculocutaneous flap group was significantly higher ($p=0.037$). The total flap survive was 91.30%, with one total loss in each group. There was a tendency for fasciocutaneous flaps to present better aesthetic results, however, when the statistical analysis of group comparison was carried out, there was no statistically significant difference ($p=0.109$). There was no statistically significant difference in relation to the nutritional status, minor complications of free flaps and minor complications of donor site. Table 1 describes the results.

Conclusion: Both fasciocutaneous and musculocutaneous flaps proved to be effective for AODF reconstruction. The fasciocutaneous free flap proved to be an adequate option and was associated with less morbidity in the donor area, when compared to traditional musculocutaneous flaps. The fasciocutaneous free flaps and musculocutaneous free flaps have similar aesthetic results.

Keywords: Head neck cancer; Free tissue flaps; Reconstructive microsurgery

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Table 1. Characteristics of the technical aspects of free flaps and donor site

	Group A (n =12)	Group B (n =11)	p value
Dimension of free flap (cm^2)	139 (SD±81.45)	178 (SD±49.47)	0.206
Number of perforators			0.085
1	06	01	
2	04	06	
3	02	04	
Length of the vascular pedicle (cm)	12.27 (SD±1.49)	9.40 (SD±1.35)	<0.001*
Time of flap harverst (min.)	150 (SD±15.81)	116 (SD±34.57)	0.008*
Ischemia time (min.)	73.36 (SD±27.80)	60.8 (SD±11.81)	0.691
Major complications			0.999
Partial or total flaps loss	1	1	
Others	1	-	
Minor Complications (free flaps)	3	2	0.999
Total surgical time (min.)	621.8 (SD±130.7)	646.5 (SD±63.03)	0.594
Major complications of donor site	-	4	0.037*
Minor complications of donor site	4	3	0.999

* Exact Fisher Test ($p<0.05$).

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The journal accepts original contributions in English only. After approval by the editors, all articles are referred to peer-review by at least two reviewers, who will remain anonymous throughout the entire review process. Reviewers' comments are sent to authors, so that they may revise their manuscript or give reasons for not altering it. After making corrections suggested by reviewers, the reviewed version of the article should be submitted to the **einstein** (São Paulo) through the journal's submission system. Articles are published only after the final acceptance by reviewers and editors. Authors are solely responsible for the concepts provided in articles.

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SECTIONS

The journal **einstein** (São Paulo) has the following sections: Original Article, Health Economics and Management, Case Report, Reviews, Learning by Images, Letters to the Editor, and Special Articles.

The journal also publishes Special Issues that contain Reviews and Original Articles on specific topics.

Original Article

Original Articles report results of scientific research relevant to medicine and health, including clinical, translational and basic research. The article must be original and unpublished and contain the following items: 1) Structured Abstract (Objective, Methods, Results, Conclusion), 2) Introduction, 3) Methods, 4) Results, 5) Discussion, 6) Conclusion, and 7) References. Original Articles should not exceed 4,500 words, 250-word Abstract, up to 7 figures/

tables and 50 references. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

Health Economics and Management

Articles designed to report knowledge expressing concepts that reflect on effective practices in health management, administration and economics. The following items must be included: 1) Structured Abstract (Objective, Methods, Results, Conclusion), 2) Introduction, 3) Methods, 4) Results, 5) Discussion, 6) Conclusion, and 7) References. They should not exceed 4,500 words, 250-word Abstract, up to 7 figures/tables and 50 references. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

Case Report

Case reports of a certain medical condition, particularly rare situations with relevant data to the reader, describing features, history, management of the case, etc., including a brief literature review, and relevant discussion. They should not exceed 1,000 words, 250-word Abstract, up to 2 figures/tables and 10 references. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

Review

Reviews will cover relevant topics in medicine, health and health economics. Reviews can be in the form of Systematic Reviews which present a synthesis of previous research, and use defined methods to identify, categorize, analyze and report on a specific topic. Reviews can also be in the form of Review Articles which are expected to bring new insights and perspectives to highlight key areas, or cover fields that are poorly understood. Often, reviews will be prepared by authorities in the subject area of the review. Simple reviews of the literature will typically not meet these requirements. Review Articles can be in the form of mini-reviews offering concise reviews on a focused topic of up to 2,000 words and 30 references or larger reviews covering a subject in more depth and up to 4,500 words, up to 4 tables/figures, 250-word Abstract, and up to 100 references. Reviews may be solicited by the editors, but prospective authors can also send a presubmission e-mail query to the journal explaining why the topic is important and relevant to the readership. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

Learning by Images

A typical pathognomonic image – ultrasound, computed tomography, X-rays, magnetic resonance imaging, photograph of surgery, microscopy or clinical sign – followed by an explanatory text. They should not exceed 300 words and 10 references. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

Letters to the Editor

Letters to the Editor can share important insights on topics relevant to medicine and health research, comment on or discuss papers published in the journal, or report ongoing original research, scientific findings, etc. They should not exceed 150 words and 5 references. Letters to the Editor will not go through peer-review and they will be published after evaluation by the Editor and relevant members of the Editorial Board.

Special Articles

This section includes topics with scientific relevance that fall outside of the categories above, and can include consensus reports, recommendations or guidelines. They should not exceed 3,000 words and 40 references. All manuscripts determined to be of potential interest by the Editor and Associate Editors will be peer-reviewed.

All contributions should follow the requirements below, which are based on the format proposed by the International Committee of Medical Journal Editors (ICMJE), published in the article Uniform requirements for manuscripts submitted to biomedical journals, available at http://www.icmje.org/recommendations/browse/manuscript-preparation.

TECHNICAL REQUIREMENTS

The authors must submit the articles containing:

- Text typed in double-spaced 12 point Arial font, 2.5cm margin on each side, highlighting each section of the article.
- Authors' statement that the manuscript is not under consideration, and will not be submitted to publication, in another journal (available at the electronic submission system).
- Studies performed that require animal or human subjects ethical committee approval must include in the methods section the appropriate ethical committee approval number. For example, human subject studies performed in Brazil must include the CAAE number.

- Conflict of interest disclosure statement from each author.

PREPARING A MANUSCRIPT

- **Title:** title of the article, in English, which should be concise, but informative.
- **Abstract:** abstract, in English, limited to 250 words. For original articles, abstracts should be structured (Objective, Methods, Results, Conclusion), describes the main parts of the work and highlights the most relevant data. For articles of other sections, the abstract should not be structured.
- **Keywords:** provide at least 5 and no more than 10 keywords, in English reflecting the content of the paper. Keywords must be based on the Medical Subject Headings (MeSH) of the National Library of Medicine, and available at https://www.ncbi.nlm.nih.gov/mesh/.
- **Registry in Clinical Trials Database:** indicate, for Clinical Trials, the registry number in the clinical trials database (https://clinicaltrials.gov).*
- **Text:** text must comply with the structure required for each category of article. Citations of authors in the text must be numbered sequentially, by superscript Arabic numerals in parentheses. The complete definition of abbreviations and acronyms should written before their first use in the text. Do not use abbreviations or acronyms in title and abstract. In table and figure legends, the abbreviations must be followed by the full term.
- **Acknowledgements:** this describes collaboration by individuals that deserve acknowledging but do not qualify for authorship. This section should also be used to provide information about financial and/or technical support, etc.
- **References:** they must be numbered consecutively in the same order they appear in the text, and identified by Arabic numerals. References follow the "Vancouver Style", and the titles of journals should be abbreviated according to the style presented by the List of Journals Indexed in Index Medicus, of the National Library of Medicine, available at http://www.ncbi.nlm.nih.gov/nlmcatalog/journals. For any references, mention up to six authors. In case of more than six authors, mention the first six, followed by et al., as shown in the following examples:

Articles from journals
Moniz MH, Low LK, Stout MJ. Intensive nurse home visiting program and adverse birth outcomes. JAMA. 2022;328(1):23-4.

Oliveira MM, Andrade KF, Lima GH, Rocha TC. Metformin versus glyburide in treatment and control of gestational diabetes mellitus: a systematic review with meta-analysis. einstein (São Paulo). 2022;20:eRW6155.

Books
Ritchie S. Science fictions: how fraud, bias, negligence, and hype undermine the search for trusth. New York: Metropolitan Books; 2020.

Chapters of books
Josephson CD, Strauss RG. Plasma transfusions. In: Behrman RE, Editor. Nelson textbook of pediatrics. 21st ed. Philadelphia (PA): Elsevier; c2020. p.2585-6.

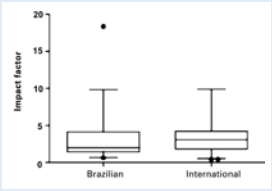
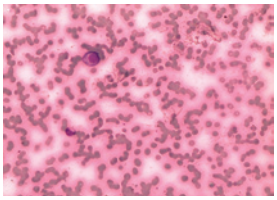
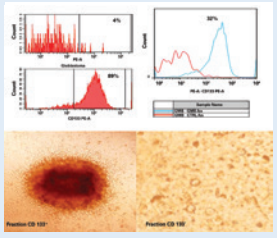
Works presented in conferences
Rivarola E, Dimuro CA, Scandolo MC, Quintero Florez A. Design of gourmet menus high in fiber for diabetic patients of the French sanatorium: evaluation of the nutritional content, acceptability, organoleptic characteristics and glycemic control. Clinical Nutrition ESPEN. 2021;46:S690. [ESPEN 2021 Virtual Congress; 2021 Sep 9-14].

Thesis
Pinheiro LL. Avaliação da aorta torácica de brasileiros tabagistas por tomografia de tórax de baixa dose: diâmetros e prevalência de aneurismas [tese]. São Paulo: Faculdade Israelita de Ciências da Saúde Albert Einstein; 2021.

- **Tables:** all tables (≤ 4 tables) should contain the title and heading for columns and must be mentioned in the text. They should be numbered sequentially by Arabic numerals, in the order they appear in the text. Table footnotes should have a definition for abbreviations and statistical tests used.

* **Important note:** in support of the policies on registry of clinical trials of the World Health Organization (WHO) and ICMJE, the journal **einstein** (São Paulo) understands the relevance of these initiatives for registration and international dissemination of information on clinical studies. The journal only accepts for publication the clinical research articles that have received an identification number in one of the Clinical Trials Registries validated by the criteria established by the WHO and the ICMJE, available at https://clinicaltrials.gov or at the website PubMed, in the item <clinicaltrials.gov>. The identification number should be shown at the end of the abstract.

Guidelines for formatting figures

Image Type	Description	Example	Recommended Format	Color mode	Resolution
Line art	An image composed of lines and text, which contains no tonal or shaded areas		tif or eps	Monochrome 1 bit or RGB	900 to 1,200 dpi
Halftone	A continuous tone photograph containing no text		tif	RGB or Grayscale	300 dpi
Combo	Image contains halftone plus text or line art elements		tif or eps	RGB or Grayscale	500 to 900 dpi

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- **Figures:** any figure (images, graphs, photographs and illustrations) should be mentioned in the text and submitted in greater than or equal to intended display size. The journal accepts no more than four figures per article. They should be numbered sequentially by Arabic numerals, in the order they appear in the text. If the figures have already been published, a written permission for reproduction must be provided by the author/editor, and legends should include the source of publication.

MANUSCRIPT SUBMISSION

Articles should be submitted to the journal **einstein** (São Paulo) at https://mc04.manuscriptcentral.com/eins-scielo. All authors must have an ORCID ID at https://orcid.org/signin.

Instructions for electronic submission

Articles should be submitted in Microsoft Word format. The file must contain the following:

- article title;
- a short title;
- full names of authors and their affiliation;
- name of the department and organization that the work should be attributed to;
- full name, address, telephone number and, E-mail of the corresponding author;
- an abstract and at least 5 and no more than 10 keywords;
- main text;
- references.

Note: Annexes, appendices, tables and figures (images, graphs, photographs, and illustrations) should be uploaded in the submission system. Please submit tables as editable text and not as images.

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