



**British Society for
Oral & Maxillofacial Pathology**

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Poster Presentation Abstracts

P1. Dissecting diagnostic enigma: multiple facial nodules in a middle-aged woman.

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ABSTRACT

A 40-year-old woman was referred to the oral medicine and diagnostic clinic at the Dental Specialist Centre, Hafar AlBatin, Saudi Arabia, for multiple facial papules and nodules that presented for 10 years and involved the forehead, cheeks and nasal area. The patient reported that the lesions presented initially on the right side and then started to involve the left side and forehead until hundreds of nodules were reached. The lesions were asymptomatic except for occasional pain in some of the nodules; however, it caused significant facial disfigurement. The patient was medically free with no neurological, GIT, or other involved sides. A family history was obtained, and the patient denied consanguinity and revealed that two of her brothers died because of renal tumours at a young age and that her younger sister started to have similar nodules 6 years ago. A skin biopsy revealed a well-demarcated tumour involving the dermis and composed of a spindle cell proliferation with abundant eosinophilic cytoplasm and blunt-ended, cigar-shaped nuclei with no pleomorphism, increased mitosis, and necrosis consistent with leiomyoma. Our diagnostic hypothesis was fumarate hydratase tumour predisposition syndrome (Hereditary leiomyomatosis and renal cell cancer), so the tissue was sent for FH staining.

P2. R-loops: The prognostic potential in OSCC and OED.

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ABSTRACT

Oral epithelial dysplasia (OED) is a histological diagnosis of potential precursors to oral squamous cell carcinoma (OSCC). It can be used as a prognostic indicator through histopathological grading, a meticulous process which has long suffered from poor reproducibility and inconsistencies. A potential key to improving OED grading are biological markers which can provide objectivity to the process. R-loops are three-stranded nucleic acid structures which have physiological roles, but an uncontrolled build-up has been linked to genomic instability, a characteristic of cancer. S9.6 immunohistochemistry (IHC) can be used to visualise R-loops. In this study, R-loops expression was assessed via S9.6 IHC on normal (n=5), dysplastic (n=20), and OSCC (n=17) slides. They were then quantified using H-score, Allred score, and positive percentage in QuPath. One-way ANOVA was used to statistically compare the expression levels across the cohort. Results showed that OSCC exhibited the highest R-loops expression, followed by OED and then normal tissue ($P<0.05$). When grades were individually assessed, mild dysplasia was upregulated compared to moderate and severe dysplasia, but these differences were not statistically significant. These findings suggest elevated R-loops levels in both OED and OSCC compared to normal tissue, indicating increased genomic instability. Additional research is warranted to verify these findings and further explore the role of R-loops as a potential prognostic marker.

P3. Histopathology request forms in the Oral and Maxillofacial Surgery Department: Are we completing them correctly? An audit.

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ABSTRACT

Objectives: The audit evaluated the completeness of histopathology (HP) request forms submitted by the Oral and Maxillofacial Surgery Department at Altnagelvin Area Hospital, aiming for 100% compliance to aid histopathologists in diagnosis.

Methods: A checklist based on the Western Health and Social Care Trust's Minimum Acceptance Criteria was used to assess 125 forms in each of two cycles: October 2023 to February 2024 (Cycle 1) and February to May 2024 (Cycle 2). Forms were examined for omissions in fields such as clinician signatures, anatomical site, time, source, consultant's name, and patient status.

Results: In Cycle 1, significant omissions were noted: 1 form was unsigned, 5 lacked anatomical site details, 20 omitted the time the specimen was collected, 28 did not specify the source, 33 missed the consultant's name, and 67 omitted patient status. By Cycle 2, improvements were evident: all forms were signed, and omissions decreased to 2 forms for anatomical site, 6 for time, 8 for source, 11 for consultant's name, and 36 for patient status. However, patient status and consultant's name fields remained the most frequently missed.

Conclusion: The audit highlighted a positive trend in form completion but identified persistent gaps. Recommendations include adding "Red flag" indicators for frequently omitted fields, highlighting these in red, providing laminated completed forms in clinics for reference, and including the next appointment date to ensure consistency and accuracy. Accurate and complete request forms are critical for effective diagnosis, ensuring optimal patient care and minimising delays in treatment.

P4. Effect of submucosal injection of dexamethasone on postoperative oedema along with pain and trismus following surgical removal of impacted mandibular third molars: A randomised controlled trial.

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ABSTRACT

Objectives: To investigate the effect of submucosal injection of 4 mg dexamethasone on swelling after surgical removal of impacted mandibular third molar. In addition, we aimed to assess the effectiveness of submucosal 4 mg dexamethasone on postoperative pain and trismus.

Methods: A randomized, double-blinded clinical trial study was conducted to investigate the effects of locally administered steroids during surgical removal of impacted mandibular third molar. Participants with similar anatomical position and difficulty based on Pell-Gregory classification and Pederson scoring, between 20-40 years of age, and with asymptomatic impacted mandibular third molar were included in the study. Participants with long-term steroid therapy, smokers/alcoholics, medically compromised patients (diabetes and organ transplant), and pregnant females were excluded from the study.

Results: A total of 120 individuals (60 steroid: 60 placebo) were included in the study. A significant reduction in swelling on day two with more improvement in the experimental steroid group in day 2 postoperatively (p-value= 0.002). The steroid group participants had significant reduction in pain (VAS score) for the first 6 days postoperatively (p-value <0.05). This was also confirmed with the intervention group consuming fewer analgesic tablets throughout the 7 days postoperatively (p-value <0.05). In addition, no statistically significant difference was seen in mouth opening between the two groups postoperatively (p-value >0.05)

Conclusions: The study showed that the administration of 4 mg dexamethasone injection was effective in the reduction of postoperative swelling and pain. It can, therefore, be safely used preoperatively as a single dose through the intraoral submucosal route.

P5. Aggressive sino-orbital fungal infection in an immunocompetent patient.

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ABSTRACT

Background: Invasive sino-orbital fungal infections are rare but challenging conditions that can occur in immunocompetent individuals. These infections are often difficult to diagnose and can result in severe complications if not treated promptly. Mucormycosis and other fungal species can colonize the paranasal sinuses and, under certain conditions, progress to aggressive, locally invasive masses.

Objective: This case report aims to highlight the occurrence of invasive sino-orbital fungal infections in an immunocompetent patient, emphasizing the diagnostic and management challenges associated with these infections.

Case: A 57-year-old asthmatic man presented with left infraorbital pain and swelling lasting two months. Radiological investigations, including MRI and CT scans, revealed an extensive fungal mass involving the right maxillary sinus and orbital floor. An incisional biopsy confirmed the diagnosis of an aggressive fungal infection characterized by septate hyphae.

Management: The patient underwent surgical debridement using functional endoscopic sinus surgery (FESS) and orbital floor reconstruction with a PEEK implant to address the defect and prevent enophthalmos. Antifungal therapy with intravenous amphotericin B, followed by oral voriconazole, was initiated for long-term suppression.

Outcome: The patient responded well to the treatment, with resolution of symptoms and improved visual function. Regular follow-up is ongoing to monitor for potential recurrence. **Conclusion:** This case underscores the importance of considering fungal infections in the differential diagnosis of orbital floor pathologies, even in immunocompetent individuals. Early identification, a multidisciplinary approach, and prompt treatment, including surgical debridement, orbital reconstruction, and antifungal therapy, are crucial for optimal outcomes.

P6. Metastatic tumours to the parotid: A 20-year single institutional experience with an emphasis on 14 unusual presentations.

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ABSTRACT

The parotid gland is a rare site for distant metastasis. We aim to provide an overview of metastatic tumours to the parotid over the past 20 years, focusing on clinicopathological analysis of 14 rare diagnoses. To the best of our knowledge, we are the first group to present the most up-to-date and largest case series on unusual metastases to the parotid. A total of 93 metastatic cases were identified from 2004 to 2023, on the pathology information system at North West London Pathology, with squamous cell carcinoma (n=45, 48.4 %) as the most common primary, followed by malignant melanoma (n=29, 31.2%) and Merkel cell carcinoma (n=4, 4.3%). We came across 14 rare tumours, including metastatic adenocarcinoma from kidney (n=3, 3.2%), lung (n=3, 3.2%) and breast (n=1, 1.1%), olfactory neuroblastoma (n=3, 3.2 %), soft tissue sarcoma (n=2, 2.2 %), small cell carcinoma (n=1, 1.1 %) and hidradenocarcinoma (n=1, 1.1 %). Half of all secondary neoplastic lesions (50.5 %) were found in intra-parotid nodes, while the other half (49.5%) were found in parotid parenchyma. Our study underscores the necessity of maintaining a broad differential diagnosis, which is imperative for accurate diagnosis and effective treatment planning.

P7. Cribriform morular thyroid carcinoma: A rare case in a male patient with hypogonadotropic hypogonadism.

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ABSTRACT

Cribriform morular thyroid carcinoma (CMTC) is an uncommon thyroid malignancy of uncertain histogenesis, occurring in association with familial adenomatous polyposis (FAP) or sporadically. The principal pathogenetic event of CMTC is constitutive activation of the WNT/ β -catenin pathway. Oestrogen appears to play a role in tumorigenesis, with high expression of sex hormone receptors in tumour cells acting synergistically in young females promoting tumorigenesis, explaining the higher incidence of CMTC in females. We present a rare case of CMTC with high grade features, presenting as a right sided neck mass in a thirty-nine-year-old male with increased body mass index (BMI), hypogonadotropic hypogonadism and a history of Hodgkin lymphoma. Histologic evaluation of the right thyroid lobe revealed a circumscribed tumour with papillary and cribriform architecture, lacking colloid and the classical nuclear features of papillary thyroid carcinoma (PTC), with extensive vascular invasion and focal tumour necrosis. No prominent morules were observed. The tumour showed strong nuclear and cytoplasmic staining for beta-catenin, with diffuse expression of thyroid transcription factor (TTF), oestrogen receptor and progesterone receptor. A suspicious left lower lobe lung nodule was identified on radiology and metastatic CMTC was confirmed on endobronchial ultrasound-guided fine-needle aspirate. This case adds evidentiary support to high grade features such as tumour necrosis and high Ki67 proliferative index conferring a worse prognosis and indicating a more aggressive clinical course. Furthermore, the unlikely setting of increased oestrogen levels in a male patient as a result of increased BMI and hypogonadotropic hypogonadism reaffirms the role of oestrogen in the development of CMTC.

P8. Is the current Sheffield salivary gland pathology pathway delivering an efficient diagnostic service?

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ABSTRACT

Background: Salivary gland neoplasms exhibit extensive morphological diversity, complicating histopathological diagnosis. Ultrasound-guided tissue sampling, particularly fine-needle aspiration cytology (FNAC), remains the first-line investigation, but its diagnostic accuracy is limited. Core needle biopsy (CNB) offers improved tissue architecture assessment, aiding differentiation between benign and malignant pathology. This service evaluation assessed the efficiency of the current salivary gland pathology diagnostic pathway at Sheffield Teaching Hospitals NHS Foundation Trust.

Methods: A prospective review was conducted on all salivary gland CNBs processed by Oral and Maxillofacial Pathology (OMFP) and General Pathology between May and August 2024. Data collection included referral source, radiology and pathology teams, diagnostic yield of the CNB, use of additional tests, turnaround time, diagnosis, and second-opinion cases. Statistical analysis was performed using Microsoft Excel, with comparisons between pathology and radiology teams.

Results: A total of 46 CNBs were analysed, with 71.7% and 28.3% seen by General Pathology and OMFP teams respectively. The overall diagnostic yield was 76.1%, with no significant difference between General and Dental and Maxillofacial Radiology teams ($p=0.657$). Additional tests were required in 56.5% of cases. The mean pathology report turnaround time was 11.77 days for General Pathology and 8 days for OMFP ($p=0.164$). Only one second-opinion case was identified, but documentation was insufficient to determine its impact.

Conclusions: This project highlights the robust diagnostic yield for CNBs in salivary gland pathology. However, the local second-opinion process lacks transparency, and sample size limitations warrant further study. Recommendations include improved documentation and regular re-assessment to ensure an efficient diagnostic service.

P9. Adenoid cystic carcinoma in breast and salivary gland - a study of comparison.

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ABSTRACT

Adenoid cystic carcinoma is a biphasic tumour with epithelial and myoepithelial components, occurring in both the salivary glands and breast. These tumours share similar morphological spectra and the MYB-NFIB fusion gene, though differences in microRNA expression have been noted. Their clinical course varies, with salivary tumours having higher recurrence and metastasis risks, while breast tumours generally show an excellent prognosis. This study compared the morphological spectrum of tumours from both sites. Sixteen cases (8 breast, 8 salivary) were identified from institutional archives over the last five years. Most breast tumours exhibited cribriform morphology (grades 1 and 2), while one showed basaloid morphology (grade 3) with extensive perineural invasion. Possible perineural invasion was seen in one case, absent in another, and not mentioned in the rest. No lymphovascular invasion or lymph node metastasis was noted. All cases were oestrogen receptor, progesterone receptor, and HER-2 negative, except two with 3+ ER and 4+ PR staining. All tumours were pT2. The grade 3 tumour with perineural invasion developed pleural metastasis 1.5 years post-excision. Salivary gland tumours displayed similar patterns, with one high-grade basaloid tumour and the rest showing cribriform or tubular patterns. Perineural invasion was noted in five cases (62.5%), and lymph node metastasis in one. TNM stages ranged from pT1 to pT4. Despite similar morphological patterns, salivary tumours showed greater perineural invasion and nodal metastasis. In breast tumours, high-grade morphology and perineural invasion correlated with metastasis and poorer prognosis.

P10. Beware of clarity: The hidden complexity of clear cell CEOT.

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ABSTRACT

Introduction: Odontogenic tumours are rare and present significant diagnostic challenges. Calcifying epithelial odontogenic tumour (CEOT), also known as Pindborg tumour, is an uncommon benign odontogenic tumour accounting for only 1% of all odontogenic neoplasms. The clear cell variant of CEOT is exceptionally rare and frequently misdiagnosed due to its overlapping histological features with malignant clear cell tumours at this site. This case highlights the diagnostic complexities and emphasizes the importance of a multidisciplinary approach in evaluating rare odontogenic neoplasms.

Case: A 32-year-old female presented with a slowly enlarging mandibular lesion between LR5 and LR6. Radiographic imaging showed a well-defined mixed radiolucent-radiopaque lesion with cortical thinning. Histopathological examination revealed sheets, nests and cords of epithelioid cells with diffusely clear cytoplasm, interspersed with hyalinized connective tissue and rare amyloid like deposits. Congo red staining confirmed amyloid deposition with birefringence under polarized light. The Ki-67 index was low. The differentials included clear cell odontogenic carcinoma and salivary gland tumours with clear cell change. Molecular analysis revealed no EWSR1 rearrangements, confirming the diagnosis of CEOT (clear cell variant).

Discussion: Clear cell changes in odontogenic tumours often raise concerns for malignancy, making accurate diagnosis crucial. Despite its benign nature, this CEOT variant exhibits locally aggressive behaviour and a higher recurrence rate than conventional CEOT. Amyloid deposition serves as a key diagnostic clue. Given its rarity and aggressive potential, long-term post excision follow-up is warranted. Molecular analysis is crucial in distinguishing CEOT from its histologic mimics.

P11. Not all that swells is salivary: Unmasking epithelioid haemangioendothelioma of the parotid.

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ABSTRACT:

Introduction: Soft tissue tumours are often thought to be confined to classic anatomical locations, but they can arise in unexpected sites. Epithelioid haemangioendothelioma (EHE) is a malignant vascular neoplasm that typically affects soft tissue, bone, lung, skin and liver. This case of parotid gland EHE mimicking a salivary neoplasm highlights the diagnostic challenges of soft tissue tumours at rare sites.

Case Presentation: A 31-year-old male presented with a firm, painless swelling in the right parotid gland. MRI showed a well-circumscribed, heterogeneous mass, initially suspected to be a primary salivary gland neoplasm. Histopathology revealed epithelioid cells in nests and cords within a myxohyaline matrix and thick-walled vascular structures. Cytological variability was seen, with nuclear pleomorphism, prominent nucleoli, rare mitotic figures and focal necrosis. Prominent angiocentric growth with obliteration of vascular lumina was seen. Perineural invasion was also noted. The tumour infiltrated intraparotid lymph nodes. IHC was positive for AE1/3, CD31, CD34, and ERG, confirming vascular differentiation. IHC for TFE3 was positive while CAMTA1 was negative. Molecular analysis detected the WWTR1-CAMTA1 gene fusion, confirming EHE.

Discussion: EHE is a wolf in sheep's clothing, mimicking salivary gland neoplasms due to its epithelioid morphology and epithelial marker positivity. This deceptive resemblance can lead to misdiagnoses, delaying appropriate intervention. While some cases remain indolent, others exhibit aggressive behaviour, necessitating precise histopathological assessment. Soft tissue tumours defy anatomical boundaries, emerging in unexpected sites. Vigilance is paramount—integrating histopathology, immunohistochemistry and molecular testing is essential to avoid diagnostic pitfalls.

P12. Comprehensive analysis for diagnosing sialadenitis in a recurrent aphthous stomatitis patient: A case report.

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ABSTRACT

A comprehensive examination is mandatory in cases where systemic disease is suspected. This case report presents a 23-year-old female patient with a history of gastroesophageal reflux disease and uncontrolled anaemia. She has been suffering from recurrent ulceration of the intraoral mucosa, especially on the labial, buccal, and ventral surfaces of the tongue, for a period of 10 years. A physical examination of the patient revealed swollen lymph nodes and minimal tenderness upon palpation of the left submandibular area. An intraoral examination revealed ulcerations on the left labial and right buccal mucosa. The diagnosis was recurrent aphthous stomatitis (RAS). The patient was prescribed an antiseptic mouthwash to reduce secondary infections and topical corticosteroids to suppress the inflammatory process. Laboratory investigations revealed that the patient exhibited low haemoglobin, mean corpuscular volume (MCV), mean corpuscular haemoglobin concentration (MCHC) and mean corpuscular haemoglobin (MCH) levels, suggesting an iron deficiency anaemia. To address the anaemia, a haematological intervention was deemed necessary. A surgical intervention was performed on the submandibular area by an oncologist, following a series of preliminary examinations, ultrasound and histopathological investigations. The ultrasound scan revealed lymphadenitis in the neck, and the histopathological examination confirmed the presence of intact epithelial and myoepithelial cells, monomorphic cells, and swollen stroma without malignancy. The histopathologist's diagnosis was sialadenosis with chronic sialadenitis. Sialadenitis can be caused by infection with bacteria or inflammation in the oral cavity, and a thorough examination is needed to determine the aetiology and the definitive diagnosis in order to avoid recurrent sialadenitis.

P13. The morphological heterogeneity of oropharyngeal carcinomas. Phase 1: Pilot study on the prognosis of oropharyngeal carcinomas.

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ABSTRACT

Oropharyngeal squamous cell carcinoma (OPSCC) is classified into HPV-associated and HPV-independent types in the 5th edition of the WHO classification of Head and Neck Tumours (1). HPV-associated OPSCC is more common and is caused by transcriptionally active high-risk HPV, with HPV16 being implicated in approximately 90% of cases. It usually affects younger individuals and shows better overall prognosis and survival. The tumour typically arises from the tonsillar crypts and shows morphologic heterogeneity and variations in clinical behaviour and treatment response. There are eight defined subtypes reflecting the morphological diversity of this tumour. Some studies have demonstrated that a subset of patients exhibited disease progression within 2 years of management, which suggests that the tumours show variable response to standard treatment (2,3). The molecular landscape and heterogeneity of HPV-associated OPSCC has also been studied (4) and a subgroup of tumours showed aggressive clinical features and molecular profiles comparable to HPV-independent OSCC and were associated with poor clinical outcomes and resistance to therapy. The aim of this study is to assess the morphological heterogeneity of oropharyngeal carcinomas with emphasis on the challenges in diagnosis both on cytomorphology and architecture. Oropharyngeal resection specimens reported in our department over a four-year period from January 2021-2025 will be included. This is the first stage of a pilot study in which we plan to evaluate the prognosis of oropharyngeal squamous cell carcinoma, with a focus on histological and molecular diversity, clinical management, and clinical outcomes.

P14. A service evaluation of the DPAS staining protocol for routine oral biopsy specimens.

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ABSTRACT

Current routine laboratory practice at Sheffield Teaching Hospitals is to provide H&E staining on three levels and DPAS staining on one level, for all biopsies of white, red, mixed, and/or ulcerated lesions within the oral cavity. When a high suspicion for fungal infection remains, despite a negative DPAS, DPAS staining on deeper levels is often requested. Occasionally, fungal hyphae will be identified on the deeper levels. This service evaluation aimed to establish whether routine DPAS staining on three levels would identify a greater number of cases with fungal hyphae and improve specimen turnaround times. Over a 5.5week period, the laboratory provided DPAS staining on three levels for all biopsies of white, red, mixed, and/or ulcerated lesions within the oral cavity. A total of 122 biopsy specimens were included in the service evaluation. Of these 28 were positive for fungal hyphae. Fungal hyphae were identified on the first DPAS level in 26 of these specimens, while two additional specimens showed fungal hyphae on deeper levels, an increase of 1.64%, giving a number needed to treat of 61 cases. There was no impact on turnaround time. The mean in this evaluation was 6.7 days, while the departmental average for all routine biopsies is 7.5 days. The additional time and resources required to process and review DPAS on two deeper levels was judged too great to justify an increased specimen positivity rate of 1.64%. Therefore, it was recommended that the current local practice is unaltered.

P15. Morphological diversity of HPV-associated oropharyngeal squamous cell carcinoma (OPSCC).

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ABSTRACT

HPV-associated OPSCC typically has a non-keratinising appearance but its morphological spectrum is diverse and includes papillary, adenosquamous, ciliated adenosquamous, lymphoepithelial (undifferentiated), sarcomatoid / spindle cell, and basaloid subtypes. These morphological variants are not known to have any clinical or prognostic implications, but it is important to recognise them to avoid misdiagnosis. Documenting the subtype can also help in comparisons with new primaries and subsequent metastases. Additional histological findings in some cases of HPV-associated OPSCCs include extensive surface growth mimicking an in-situ process, conventional/keratinising morphology, tumour cell multinucleation, nuclear anaplasia and multifocal disease. HPV-associated neuroendocrine carcinoma can arise in the oropharynx in association with an HPV-associated OPSCC and this is important to identify as it is associated with aggressive clinical behaviour. We present an overview of the broad morphological spectrum of HPV-associated oropharyngeal squamous cell carcinoma encountered in our practice.

P16. An unexpected diagnosis in a head and neck skin biopsy.

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ABSTRACT

This 79-year-old gentleman presented with one year history of painless swelling of the face/ pre-auricular region with gradual progression over 10 months. No neurological symptoms were noted. A core biopsy of the left temporal skin was taken, which showed atypical cells with enlarged pleomorphic nuclei and prominent nuclear pseudo inclusions. Immunohistochemistry showed strong expression of vimentin and p63, but no expression of other cytokeratins or melanoma markers. A provisional diagnosis of poorly differentiated carcinoma was made. A PET scan showed FDG avid lesion on the left face with possible adjacent skull vault infiltration. During head and neck MDT discussion the possibility of meningioma was raised. The case was referred to neuro/skull base MDT at the regional neurosurgical unit and a grade 1 meningioma was confirmed by the neuropathology team. CT showed a destructive infiltrative meningioma 70mm in size with a extracranial infraorbital extension. Meningioma presenting as a cutaneous lesion in head and neck area is a rare diagnosis. The diagnosis can be challenging in tissue from an unusual location. The discussion with specialised MDT/subspecialties and applying a larger panel of immunohistochemical and molecular testing is key to successful diagnosis and patient's management.

P17. Diagnostic challenges of the mixed neuroendocrine-nonneuroendocrine neoplasm (MiNEN) in the head and neck.

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ABSTRACT

A 69-year-old man with a 10-week history of hoarseness presented with a bulky mass in the right pyriform fossa and multiple enlarged lymph nodes. He had no prior history of malignancy. Biopsy from the hypopharyngeal mass revealed a slightly unusual squamous cell carcinoma with a mix of morphological patterns. In some regions, the tumour cells were moderately differentiated with keratinisation whilst elsewhere they formed densely packed slender trabecular cords with large nuclei. These findings, in combination with the results of CT imaging, resulted in a diagnosis of T4N3 hypopharyngeal squamous cell carcinoma, treated by total laryngectomy with bilateral neck dissection and partial pharyngectomy. A mixed pattern of tumour was present with areas of keratinising squamous cell carcinoma alongside distinct areas with a neuroendocrine phenotype, resulting in a diagnosis of a mixed neuroendocrine-nonneuroendocrine neoplasm. Metastatic carcinoma with extranodal extension was present in the neck dissection. Adjuvant radiotherapy was subsequently provided. At 2- year review, CT imaging identified a large adrenal mass, which was unsuitable for surgical resection or stereotactic radiotherapy. Histological examination of the core needle biopsy taken from this adrenal mass revealed predominantly keratinising squamous cell carcinoma with focal areas morphologically resembling the neuroendocrine component in the original resection, however similar to the original biopsy of the laryngeal mass, it lacked a neuroendocrine immunophenotype. This case explores how sampling, in these mixed lesions is challenging, particularly given that much of the lesion has overt squamous morphology. Changes can be subtle but can have profound prognostic and therapeutic implications.

P18. Epithelial-myoepithelial carcinoma of salivary gland and adenomyoepithelioma of breast: A comparison of cases.

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ABSTRACT

Introduction: Epithelial-myoepithelial carcinoma of salivary gland (EMC) and adenomyoepithelioma of breast (AME) are rare tumours, sharing multiple similarities despite the difference of their sites of origin. Comparison of two entities are rare in the literature. We present two cases of AME and EMC.

Case 1: An 84-year-old female presented with a painless, right parotid tumour macroscopically measuring 65mm in maximum dimension. Microscopically, the encapsulated tumour revealed a multinodular architecture with a biphasic arrangement of pleomorphic, luminal epithelial cells and abluminal, clear myoepithelial cells. Focal capsular infiltration was present. Molecular analysis showed HRAS mutation.

Case 2: A 81-year-old female presented with a palpable retroareolar nodule, radiologically measuring 13mm. Microscopically, this well-circumscribed nodular tumour with thick bands of fibrosis was composed of a biphasic dual population of small luminal cell and prominent spindly myoepithelial cells. Focal apocrine change was present. In addition, the tumour was colonized by a focus of low-grade DCIS. Myoepithelial cells were confirmed by positive CK14 and SMM stains. AME component was negative for ER and Her2.

Discussion and conclusion: Both AME and EMC occur in elderly, with a female preponderance. They both share similar histomorphology with well circumscription, multinodular growth pattern and biphasic morphology with a prominent myoepithelial component. Further, EMC and ER negative AME commonly share HRAS mutation. EMC is a malignant lesion with a favourable prognosis while AME is a neoplasm of low-malignant potential with a tendency of malignant transformation.

P19. A recurrent enteric duplication cyst with low-grade mucinous neoplasm in posterior tongue of an adult; An extremely rare presentation.

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ABSTRACT

Introduction: enteric duplication cyst (EDC) in the tongue of adults is extremely rare with only 4 reported cases in English literature. We report a case of EDC with heterotopic intestinal mucosa in an adult.

Case: A 47-yr old male presented with a left tongue swelling for 4 months duration. Imaging studies detected a 6.7cm cystic mass in left tongue. Even after the initial cyst decompression, patient experienced gradual increase in size of the mass over the next 6 months. Subsequent surgical excision specimen showed a thick walled, focally ruptured cyst with a smooth surface and containing mucoid material. Microscopically, the cyst was lined by an intestinal-type epithelium with goblet cells surrounded by a layer of smooth muscle cells. Rupturing with mucin extravasation and healing with reactive epithelial proliferation were noted. There was no dysplasia or malignancy. The lining epithelium was positive for CK20, CDX2 and CK7. Ki67 index was low. On follow up MRI, a 3.6 cm sized recurrent cyst was identified. Microscopically, it showed a lining glandular epithelium, proliferating with a villous architecture, and low-grade dysplasia, confirming as a recurrent EDC complicated by low grade mucinous neoplasm.

Discussion: Persistent EDC until adult life is rare, and it increases risk of rupture, size related obstruction of vital organs and malignant transformation. Therefore, EDC needs to be considered for differential diagnosis for cysts in the head and neck region. High clinical and radiological suspicion and early diagnosis can prevent morbidity associated with this congenital malformation in adult patients.

P20. Oral paracoccidioidomycosis: A South American multicentre analysis of 80 patients.

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ABSTRACT TEXT

Objective: To describe the demographic profile and clinicopathologic features of oral paracoccidioidomycosis from four South American countries.

Methods: Data were retrospectively collected from the records of 6 oral medicine services in Argentina, Brazil, Colombia, and Venezuela. Demographic data, clinical and diagnosis methods of oral paracoccidioidomycosis were evaluated.

Results: 80 cases of oral paracoccidioidomycosis were included (18 from Argentina, 15 from Brazil, 4 from Colombia and 43 from Venezuela). Majority of patients were males (92.3%), with a male/female ratio of 15:1 approximately. Age ranged from 9 to 76 years old, with a mean of 48.76 ± 11.41 years. Only 24.61% of the patients reported agriculture or rural occupations. Interestingly, 90.8% of patients showed oral lesions exclusively, without any systemic compromise. In addition, pulmonary involvement was only demonstrated in 32.3% of patients. The most common locations of the lesions were gingiva, lips, buccal mucosa and alveolar ridge. Single lesions were most frequently found in the tongue. All patients were diagnosed by biopsy. However, different ancillary methods were performed depending on the centre. Venezuelan biopsies were stained with Grocott-Gomori, whereas all Argentine cases were supported by fungus cultures. Direct smear or cytology were performed less frequently. Molecular biology was only used in one case.

Conclusions: Paracoccidioidomycosis is most common in men aged 40 to 60 years old, and oral lesions may be easily recognizable by a trained oral medicine practitioner. In most cases direct smear and biopsy are sufficient for diagnosis and to initiate a treatment in a timely manner. Paracoccidioidomycosis is an important fungal infection in Latin America and the recognition of oral lesions is imperative, as it is often the first and, in many patients the only manifestation of the disease.

P21. High grade transformation in acinic cell carcinomas. Report of three cases.

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ABSTRACT

Background and objective: Acinic cell carcinoma (ACC) is a malignant salivary neoplasm showing serous acinar differentiation. It represents 10% of all salivary gland malignancies and the vast majority occur in the parotid gland. Almost all ACCs are low-grade with good prognosis. High-grade transformation is a rare but described phenomena with significant worse prognosis compared to low-grade lesions. Pre-operative diagnosis of high-grade ACC (hACC) can be challenging on FNAC or core biopsies even for experienced Head and Neck Pathologists.

Case report: We present 3 cases of hACC that we have encountered in the last 2 years occurring in women aged 44-70 years old at presentation. The relevant histological, immunohistochemical and molecular features are presented. Differential diagnoses and relevant review of the literature are discussed. In keeping with the known aggressive course, two patients are alive with known distant metastasis, and one died of disseminated disease within a year of diagnosis.

Conclusion: hACC should be included in the differential diagnosis of poorly differentiated salivary neoplasms. In the absence of a definitive low-grade tumour component in the biopsy/excision, molecular testing with NR4A3 FISH or immunohistochemistry may allow definitive pre-treatment diagnosis.

P22. Extra-nodal nodular lymphocyte-predominant Hodgkin lymphoma arising in the submandibular gland.

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ABSTRACT

Introduction: Nodular lymphocyte-predominant Hodgkin lymphoma (NLPHL) is a rare subtype of Hodgkin Lymphoma (HL), accounting for approximately 5% of all cases. When seen, these lesions most commonly present in a peripheral lymph node. Extra-nodal presentation of NLPHL in the salivary glands is very rare, with few cases reported. We present a case of extra-nodal NLPHL of the submandibular gland (SMG).

Case report: A seventy-one-year-old man presented with a painless, slow growing lump in the right submandibular region. Cytology was suspicious for lymphoproliferative disease and the patient proceeded to excision of the SMG. Microscopically, the gland was infiltrated by a lymphoid population which lacked a surrounding capsule and appeared to be contained within the salivary gland, with no evidence of underlying lymph node architecture. The infiltrate showed a nodular proliferation of large pleomorphic cells with variable nuclei, on a background of small to intermediate lymphoid cells. CD57+ T cells formed rosettes around these larger, pleomorphic cells which stained positively for CD20, CD79a, PAX5 and OCT2. The nodules were supported by a network of follicular dendritic cells, which stained positively with CD21 and CD23.

Discussion: Lymphomas affecting the submandibular gland are rare. When seen, extra-nodal marginal zone and follicular subtypes are the most frequently encountered. To our knowledge, there are currently no reports of an extra-nodal NLPHL arising in the submandibular gland in the literature. Awareness of this rare clinical entity is important to ensure prompt diagnosis and management.

P23. An audit of thyroid fine needle aspirates in a tertiary UK referral centre.

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ABSTRACT

Introduction: Fine needle aspiration (FNA) of thyroid lesions is a minimally invasive diagnostic procedure to cytologically assess for thyroid nodules. Ensuring accurate cytological diagnosis, adherence to national guidance, and a multi-disciplinary team approach optimises patient care and outcomes. In the United Kingdom, the BCA/RCPATH system is in place for categorisation of malignancy risk. The aim of this audit was to assess the correlation of thyroid cytology with histology, compliance with the BCA/RCPATH system and cases referred to the thyroid multi-disciplinary team (MDT).

Methods: Thyroid FNA cases reported at University Hospital Southampton NHS Foundation Trust throughout 2024 were analysed. Cases assessed as metastases were excluded.

Results: 173 cases were identified. 99% of cases included a 'Thy' category and prose description. 19% of cases were Thy1/Thy1c (13% and 7%, respectively). The positive predictive value (PPV) of 'Thy5' for malignancy was 100% (n = 10). The PPV of Thy2/Thy2c cases for benign lesions was 100% (n = 3). Of Thy4/Thy5 cases, 88% were referred to MDT locally. Of the Thy3a/Thy3f cases, 51% were referred to MDT locally.

P24. *RET* gene fusion in salivary ‘intraductal’ carcinoma.

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Introduction: So-called ‘intraductal salivary carcinomas’ are associated with recurrent *RET* gene fusions (most commonly *NCOA4-RET* and *TRIM27-RET*). The majority of these neoplasms were previously diagnosed as ‘low grade cribriform cystadenocarcinoma.’ The main differential diagnoses also include salivary duct and secretory carcinoma.

Case report: A 79 year old lady presented with a two month history of a painless, palpable left parotid lump. Upon examination, a 4x4cm non-tender and mobile mass was confirmed in the left parotid area. There were no palpable neck nodes identified and laryngoscopy was unremarkable. Radiological studies showed a 28x25x19cm heterogenous left mandibular, lytic and expansile lesion with adjacent soft tissue mass, involving the anterior left parotid tail. Biopsies showed a partly cystic and focally solid neoplasm with multilayered cuboidal to columnar epithelial lining forming occasional papillary projections and showing focal apocrine differentiation. An underlying myoepithelial layer was also present. AR was positive. S100 and Sox10 were negative. The proliferation rate assessed with Ki67 was 10%. Targeted next generation sequencing (NGS) showed the presence of a *ETV6-RET* gene fusion. *NTRK1/2/3* gene rearrangements were not detected.

Discussion: The morphological features and the presence of a *RET* gene arrangement favoured a diagnosis of ‘intraductal’ carcinoma over secretory carcinoma. The majority of ‘intraductal’ carcinoma cases are associated with *NCOA4-RET* and *TRIM27-RET* fusions rather than *ETV6-RET*, which is more classically associated with secretory carcinoma.