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OTOLARYNGOLOGY DEPARTMENT, GUY'S HOSPITAL, LONDON

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Pathologist: Professor L. Michaels, University College London

Radiologist: Dr J. Bingham, Consultant Radiologist, Guy's Hospital

Minutes: Mr A. Bibas, Specialist Registrar in Otolaryngology, Royal Sussex County Hospital, Brighton.

Case 1: A disappearing neck mass

I.M. Black, E.B. Chevretton (Guy's Hospital, London)

A 32-year-old man presented with a right supra-clavicular neck swelling which spontaneously resolved over 48 hours. He had had three similar episodes over the previous 18 months and between episodes was asymptomatic and well. Ultrasound guided fine needle aspiration cytology (FNAC) demonstrated a 3 cm cystic lesion with a solid nodule within. A tract extended behind the great vessels and the right lobe of thyroid to the prevertebral fascia. FNAC of both solid and cystic components of the mass demonstrated pus with inflammatory cells but was otherwise inconclusive.

Discussion: CT scans (with and without contrast) and previous MR scans (T1, T2 and STIR sequences) were reviewed by Dr J. Bingham. These showed a cystic lesion lying on the scalene muscles at the root of the neck on the brachial plexus. It was felt that the most likely differential diagnoses included a 3rd branchial cleft anomaly or a lymphocele.¹ Any patient presenting with a supra-clavicular neck swelling needs to have malignancy ruled out as a possible cause. After discussion it was agreed that investigation of these patients should include in all cases FNAC, ultrasound and CT/MR scanning. The consensus was that excision of the supraclavicular mass should be delayed until it recurred to improve the likelihood of complete excision.²

References

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Case 2: A rare case of neurilemmoma of the external auditory canal

R. Chopra, V. Nandapalan, L. Amma, W. Taylor* (Whiston Hospital, *University Hospital Aintree)

A 52-year-old male was seen by the GP, with a history of the nurses finding it difficult to syringe his left ear; this had been going on for many years. The GP noticed a growth in the external auditory canal and referred him to the ENT department. In the ENT clinic he was noted to have a smooth, skin-lined, bony, hard, non-tender lesion arising from the posterior bony meatal wall on the left side.

Clinically this was thought to be an osteoma. The tympanic membrane was not visible, and though he did not complain of any recent change in his hearing the audiogram showed mild conductive deafness in both ears. A CT scan was performed and it revealed a soft tissue density arising from the deep posterior canal wall; there was no suggestion of a bony lesion or any bone erosion. The patient underwent excision of the lesion via an endaural incision. There was no evidence of any bony erosion. The tympanic membrane was intact and free from the lesion. Histological examination of the specimen was reported as spindle-cell tumour with prominent palisading of nuclei and poorly defined cytoplasm. Some cells had larger darkly staining nuclei, but there was no mitotic activity. The cells had a positive immunohistochemical reaction of S100 antigen, confirming that the lesion was a benign neurilemmoma.

Discussion: The diagnosis was re-confirmed by Professor L. Michaels. Although well established and frequently seen in the internal auditory meatus, it is very rare to find neurilemmoma of the external auditory canal. This case report is to document this and perhaps to tutor us that not all seemingly bony hard swellings in the external canals should be taken to be an osteoma.

Case 3: Opercular syndrome – a diagnostic pitfall in facial nerve paralysis

S. Kalavagunta, D. Roy, W. Giri (Royal Liverpool University Hospital)

A 71-year-old man presented with right otorrhoea and sudden onset right-sided facial palsy. Examination revealed a complete facial paralysis of the right half of the face. The right ear examination showed an attic cholesteatoma. CT scan of the region showed opacification of the right mastoid and middle ear. Exploration of the mastoid revealed a small attic pouch with cholesteatoma and the entire middle ear and mastoid were full of granulations. The bony facial canal was intact. The patient developed ipsilateral IX, X, XI and XII palsy and contralateral hemiparesis a week later. He was found to have focal seizure activity on the paralysed side of the face, ipsilateral palate and tongue. MR scan showed fresh haemorrhage in the right internal capsule and a lacunar infarct in the left internal capsule. The initial admission diagnosis of intra-temporal facial nerve involvement secondary to chronic otitis media/cholesteatoma or a coincidental Bell's palsy was incorrect. Normal facial movements during involuntary activity and focal seizure activity on the paralysed side of the face, ipsilateral tongue and palate seen subsequently, indicated the site of lesion as supranuclear. The diagnosis of opercular syndrome was made.

Discussion: This syndrome can result when contralateral frontal lobe (opercular cortex) or bilateral lesions at the internal capsule level (as in the present case) innervating the ipsilateral facial nucleus in the pons are involved

secondary to traumatic, vascular, neoplastic or encephalitic causes. Supranuclear weakness of muscles supplied by lower cranial nerves (last four) is also present. Unlike other central paralyse the facial paralysis of opercular syndrome may not demonstrate 'forehead sparing', and consequently it may be mistaken for a peripheral paralysis.

This case highlights this and is unique as opercular syndrome type clinical picture may be seen without a lesion in the contralateral opercular cortex. In this case it was white matter lesion in both the internal capsules. Dr J. Bingham, consultant radiologist, reviewed the scans (CT and MR) and held the opinion that there was a lacunar infarct in the left internal capsule and haemorrhage in the right internal capsule was *in addition extending to the adjacent external capsule, insula and the operculum region*. The otolaryngologist must remember to include nuclear and supranuclear disorders in the differential diagnosis of facial palsy.

Case 4: A non-infective retropharyngeal mass

E. Appelby, A. Bibas, J. Topham (Royal Sussex County Hospital)

A 64-year-old lady was referred from her GP with a month long history of an intermittent sore throat and unilateral tonsillar swelling. There was no history of dysphagia or dyspnoea. Examination showed a smooth, non-erythematous swelling behind the left palatoglossal fold. There was no ulceration of the overlying mucosa. Fibre-optic nasendoscopy revealed that the swelling extended from the hard palate down to the level of the vallecula. All other aspects of the examination were entirely normal. A CT scan revealed a bony exostosis arising from the anterior margin of C2 on the left, which indents the retropharyngeal soft tissues and distorts the anterior retropharyngeal tissues on the left. The appearance was suggestive of an osteochondroma.

Discussion: Osteochondromas are one of the most common benign bone tumours, and occur as a result of endochondral ossification of aberrant growth plate cartilage. They consist of cortical and cancellous bone with a cartilaginous cap. Osteochondromas usually occur around the diaphysis of long bones and are unusual in the axial skeleton. Their occurrence in vertebrae has been variously reported from three to seven per cent, and in this situation they have a predilection for the cervical and upper thoracic spine. The radiological investigation of choice for diagnosis is CT, as the cortex of the bony lesion can be seen to be in continuity with that of the main vertebra. Although they are benign neoplasms, they may rarely undergo sarcomatous change.

Case 5: Parotid mass presenting in a neonate

C. Jephson, Professor M. Gleeson (Guy's Hospital, London)

A baby girl was presented at the age of two weeks with a little cheek, swelling present from birth. The swelling had doubled in size in the first month of life. Facial nerve function was normal ultrasound and MRI scans revealed a $1.7 \times 2 \times 1$ cm mass in the superficial part of the left parotid gland. FNA was suggestive of a sialoblastoma. She underwent a left superficial parotidectomy aged 11 weeks. The facial nerve was identified and preserved. A diagnosis of sialolipoma was determined on histological examination.

Discussion: Sialolipoma is an extremely rare benign lipomatous salivary gland tumour, usually of the parotid. It is composed of adipose tissue, surrounded by a fibrous capsule, with glandular components. Up until now, it has

only been described in seven cases, all in adults.¹ Although the natural history is unclear, it appears to be a benign condition. Treatment is in the form of excision.

References

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Case 6: To staple or not to staple?

H.M.B. Khalil, H.S. Kaddour, N. Patel, P. Tassone (Harold Wood Hospital)

A 75-year-old lady presented to the gastroenterologists with a six-week history of rapidly progressive dysphagia and weight loss. Flexible oesophagoscopy revealed a huge pharyngeal pouch and very narrow lumen at the level of cricopharyngeus. Barium swallow confirmed a large pharyngeal pouch extending to the upper mediastinum with narrowing of the upper oesophagus. She was subsequently admitted with total dysphagia and consented for direct pharyngo-oesophagoscopy with either stapling or open excision of the pouch. Due to failure to advance the scope through the oesophagus, she underwent open neck excision. The histopathological diagnosis revealed carcinoma in situ of the pouch and invasive squamous cell carcinoma of the post-cricoid region. She underwent total pharyngo-laryngectomy with free jejunum reconstruction, selective neck dissection and radiotherapy. She died with recurrence after two years.

Discussion: Current concepts in the management of pharyngeal pouch were discussed. Before endoscopic stapling, informed consent for possible open neck excision should be obtained in case the need to convert the approach arises for example very large pouch, small pouch and suspected malignancy. It was highlighted that we should be wary of an atypical history for example rapidly progressive dysphagia.

Case 7: Heterotopic pleomorphic adenoma of the nose presenting as cosmetic nasal deformity

A. Rokade, V. Rokade, K. Reddy, D. Roy (Warrington District General Hospital)

A 45-year-old lady presented with cosmetic nasal deformity. The patient did not have any nasal symptoms and was referred by the GP for rhinoplasty. External examination showed splaying of the nasal bones with more prominence on the right side of nasal dorsum. Anterior rhinoscopy revealed a red nodular swelling on the right side of the nasal septum. CT scan of the nose and paranasal sinuses revealed swelling arising from the right side of the septum and pushing the right nasal bone laterally. There was no evidence of bony destruction. There were no palpable nodes in the neck. The tumour was excised endonasally using 0° nasal endoscope. The patient underwent rhinoplasty and the nasal deformity was corrected by medial and lateral external osteotomies. Histological examination of the swelling revealed a pleomorphic adenoma, which was completely excised. The patient was satisfied with the cosmetic outcome. At three years follow-up, there is no evidence of recurrence.

Discussion: Pleomorphic adenoma arising from sites other than the major or minor salivary glands is rare. Occurrence of pleomorphic adenoma of the nasal cavity has been reported previously. The commonest presentations are nasal obstruction (71 per cent) and epistaxis (56 per cent). On review of the literature the authors did not come across cosmetic nasal deformity as the only presenting feature.

This case underlines the importance of thorough clinical examination of the nose before cosmetic rhinoplasty. During the discussion Professor Michaels confirmed the histological diagnosis. Professor Gleeson discussed whether there is a need for long-term follow-up and opined that the patient can be discharged from the ENT clinic after explaining the potential of pleomorphic adenoma to recur. The patient should be advised to seek medical help if any symptoms of recurrence develop.

Case 8: Stridor in a five-month-old girl

L.B. Anderson, G.A. Morrison

A five-month-old girl presented with an eight-week history of increasing cough, hoarse voice, and noisy breathing. Biphasic respiratory stridor developed, with marked recession and audible bruits in both supraclavicular fossae. Chest X-ray showed a widened superior mediastinum. CT and ultrasound suggested AV malformation. MRI showed a para-tracheal and para-aortic mass involving much of the mediastinum. MLB showed a soft, compressible ovoid swelling from 4 cm below the vocal folds, with intact tracheal mucosa. The mass was removed by medial sternotomy approach, macroscopically resembling a thyroid-type tumour, measuring 4.5 × 5.5 cm. Histology showed a juvenile haemangioma. Post-operatively, recovery was good although a left vocal fold paresis and left Horner's syndrome resulted from intra-operative nerve damage.

Discussion: Haemangiomas are more often seen in the soft tissues of the head and neck, but are rare in the mediastinum. Their natural history is to continue growing, but completely involute by the age of five years. Surgery is the treatment of choice where lesions compromise the airway. Although this is a benign lesion, incomplete excision allows local recurrence, which may be treated with steroids or alpha interferon. MRI monitoring is recommended.

Case 9: To tracheostomy or not – the management of subglottic stenosis complicating Wegener's granulomatosis

C.L. Hopkins, E.B. Chevretton (Guy's Hospital)

A female patient presented to our unit seven years ago with stridor and severe loss of visual acuity. She had been seen one year previously with nasal polyposis and bilateral middle ear effusions, and shortly before presentation had undergone resection of a 'benign tracheal lesion' with a temporary tracheostomy elsewhere. A diagnosis of Wegener's was made clinically and treatment commenced; later she found to have raised ANCA titres, supportive histology from an orbital mass biopsy, and CT scans showing a consistent pattern of disease. Her disease seems to be maintained in remission except for continued progression of her subglottic stenosis causing stridor.

Discussion: On reviewing the histology Professor Michaels commented on the difficulty in accurate diagnosis of vasculitides. Treatment options of subglottic stenosis were discussed, including medical therapy, permanent tracheostomy, stenting and open techniques of anterior and posterior cricoid split with costal cartilage grafting, and resection with thyrotacheal anastomosis. Of particular interest were endoscopic techniques with the CO₂ laser,¹ and intralesional steroid injection.² Encouraging results have been published in Maryland using dilatation and intratracheal methyl prednisolone, however Mr Morrison was of the opinion that this would be insufficient without an anterior cricoid split. We plan to contact the Maryland group for further details of their treatment regimen.

References

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Case 10: Late complication of type 1 thyroplasty: management options

N. Saravanappa, T. Harris (University Hospital, Lewisham)

A 63-year-old male presented with dysphonia following cerebrovascular accident. On examination he was found to have left vocal fold palsy. As his dysphonia did not improve with speech therapy, he underwent Isshiki type I thyroplasty using silastic implant. The patient's quality of voice improved immediately after the thyroplasty. However, the patient coughed up the silastic implant 10 months after the thyroplasty. Injection of autologous fat in to the vocal fold failed to improve the voice. As a consequence of anterior mucosal breach, the patient developed a thick web involving both vocal folds at the anterior third of the free borders. The laryngeal web was successfully treated by laryngofissure and insertion of an umbrella stent. The patient continued to have hoarseness of voice. Videostroboscopic pictures were shown in chronological order and management options were discussed.

Discussion: This case serves to remind us that implant extrusion can occur as a late complication of thyroplasty. In this present case the patient developed laryngeal web following implant extrusion. The laryngeal web was treated with laryngofissure and umbrella stent. Further management options to improve the voice include arytenoids adduction procedure, omohyoid muscle interposition and revision thyroplasty using Goretex or autologous cartilage.

Case 11: Unusual complication of sinusitis

N. Patel, H.S. Kaddour, H.M.B. Khalil (Harold Wood Hospital)

A nine-year-old boy presented to the paediatricians with a three-day history of fever, pain and swelling of the left eye. Preseptal cellulitis was diagnosed and he was treated with intravenous antibiotics for five days. Due to the lack of improvement, a CT scan was arranged which showed left-sided pan-sinusitis with a suspicion of pus collection in the supero-lateral angle of the left orbit. Under general anaesthetic, he underwent endoscopic left middle meatal antrostomy and anterior ethmoidectomy together with exploration of the left orbit by an ophthalmologist. An encapsulated mass was noted in the supero-lateral part of the orbit, which was incised; however no fluid was drained. A repeat CT scan after three days showed an abscess of the lacrimal gland which was formally drained and a corrugated drain left in-situ for two days. He made a good post-operative recovery.

Discussion: Infections of the lacrimal gland are uncommon, with suppuration and abscess formation being exceedingly rare. Acute bacterial dacryoadenitis may develop secondary to an adjacent infection, from blood-borne spread or after trauma. This case is very unusual in that infection was thought to have spread from the paranasal sinuses. Failure to recognise this complication can cause a delay in resolution of symptoms.