Images in Otology

Eustachian Tube Teratoma

Teratoma de la trompa de Eustaquio

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There is a low incidence of germ cell tumours of the head and neck, and their presence in the Eustachian tube is even less frequent. Mature teratomas are tumours formed by 3 germ cell layers, whilst dermoid tumours are composed of the mesoderm and the ectoderm. To date 16 cases have been reported with their origin in the Eustachian tube.

Teratomas usually present in children under 5 with chronic otorrhea and symptoms which mimic cholesteatoma. As a result adenoidecctomy, transtympanic drainage, or tympanoplasty is the standard procedure when clinical symptoms persist. Computed axial tomography (CAT) and magnetic resonance imaging (MRI) show a homogeneous mass with dental structures on the inside and high fat signal intensity.

We present the case of a patient aged 42 with a history of chronic otitis of the right ear from infancy. At the age of 6 a mastoidectomy was therefore performed but was unsuccessful and clinical symptoms persisted. The CAT scan showed changes which had resulted from mastoidectomy with a soft tissue density lesion in the epitympanum but with no...
ossicular chain, and also the image of a molar in the middle of an air-filled space located in the Eustachian tube where it joins up with the hypotympanum, whilst the MRI showed soft tissue in the surgical cavity with restricted spread. These findings suggest the remainder of a mature teratoma vs a dermoid tumour (figs. 1–3).

To conclude, dermoid tumours of the Eustachian tube should be included in the differential diagnosis of congenital lesions of the middle ear, which present with chronic refractory otorrhea and symptoms which mimic cholesteatoma. Imaging tests and excision are the basis of diagnosis and treatment.