Otoendoscopy aids diagnosis of a rare ear canal tumour

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DESCRIPTION

A 31-year-old woman presented with a 1-year history of mild conductive hearing loss and sensation of blockage in her left ear. She had no otalgia, tinnitus or vertigo. Otoendoscopic examination showed a smooth, skin coloured mass with a cystic-glandular appearance arising from and covering the medial two-thirds of the anterior wall of the left ear canal (figure 1A).

CT petrous bones assessed the extent of the lesion with regard to the underlying bone and middle ear. It showed an 8mm ovoid soft-tissue lesion abutting the tympanic membrane and with focal thinning of the adjacent floor and anterior wall of the bony canal (figure 1B).

Wide local excision was undertaken following multidisciplinary team discussion, and histology was consistent with a ceruminous adenoma, a rare, benign tumour arising from the ceruminous glands (figure 1C,D). She made an excellent recovery with no signs of recurrence at 6 months.

Ceruminous adenoma can cause almost any otological symptoms, but most commonly presents as sensation of a mass or conductive hearing loss.¹

The obstruction of the ear canal predisposes to concurrent otitis externa, which combined with the rarity of masses in the ear canal and the non-descript radiological appearance, makes it a diagnostic challenge. There have been no case reports with

Patient's perspective

At first I was unsure if I wanted to go ahead with surgery as I was scared of the worst case scenario, but I did know I wanted it dealt with. It was the best decision I took, as my surgery and recovery was quick and concise and I healed well.

clinical images of ceruminous adenoma, and its clinical features have been variably described in the literature, with cases describing a 'pink, smooth non tender mass';² a 'reddish, rounder, tender soft mass with discharging yellow fluid';³ and a 'mass...covered by skin'.⁴ They are usually located on the posterior ear canal wall, although this case is an exception to this rule.⁵ Otoendoscopy allows a clearer and closer view than traditional otomicroscopy, allowing identification of features suggestive of the diagnosis. Its disadvantages lie in loss of depth information due to the two-dimensional nature of the images, and fogging of the scope obstructing the view. Both of these can be overcome in the clinic setting by combining otoendoscopy with otomicroscopy.

Histologically, ceruminous adenoma has been well described, tending to be unencapsulated, demonstrating glands and small cysts, lined by proliferation of inner ceruminous cells. Cells commonly contain golden-yellow-brown pigment cytoplasmic granules.¹

Treatment is by surgical excision, for symptomatic relief and to prevent infection, and there are excellent cure rates from complete resection.¹

Learning points

- ▶ Otoendoscopy is a painless, clinic-based investigation, which allows excellent visualisation of abnormalities within the ear canal and aids diagnosis of external auditory canal tumours.
- ▶ Tumours of the ear canal are a rare but important cause of common symptoms, and require surgical intervention to prevent complications.

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Figure 1 (A) An otoendoscopic image showing tumour arising from the anterior canal wall. The cystic glandular structure is appreciable. (B) CT scan of the petrous bones showing a soft - tissue lesion within the left external auditory canal. (C) Lesion overview: cystic glandular spaces are lined by bland cuboidal and oncocytic epithelium (x40). (D) Lining epithelium shows apical snouts (apocrine secretions) (x100).

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