



## Surfer's Exostosis in a Child who doesn't Surf

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### Case Report

A 15-year-old female was referred to the Ear, Nose and Throat outpatient clinic by her General Practitioner following a consultation for ear syringing. She was noted to have a lesion in her right external auditory canal (EAC) with symptoms of blockage, discomfort and infrequent otalgia. There was no history of recurrent ear infection, otorrhoea, hearing loss or participation in aquatic activities. After wax was microsuction, otoscopy revealed a broad based-bony lesion arising from the anterosuperior region of the bony EAC, demonstrated in Figure 1. Her tympanic membrane, partially visualised behind the bony lesion, was normal and her audiogram was within normal limits.

High-resolution computed tomography of her temporal bones and internal acoustic meatuses demonstrated an exostosis arising from the anterosuperior tympanic portion of the right temporal bone, as illustrated in Figure 2A-C. She was followed-up as an outpatient for monitoring of recurrent infections and wax accumulation. Whilst she required microsuction for impacted wax, she had no further issues with recurrent otitis externa and hearing loss; as such, surgical intervention was not considered.

Our patient only required wax microsuction every 6 months. The majority of patients are asymptomatic and aural care to microsuction impacted wax and debris is only infrequently required. Those with exostoses severely obstructing the EAC are prone to recurrent episodes of otitis externa and related conductive hearing loss, and are potentially candidates for surgical removal [1,2].

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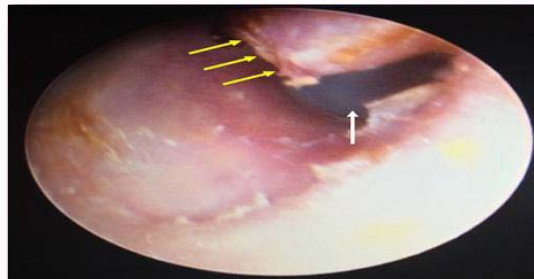
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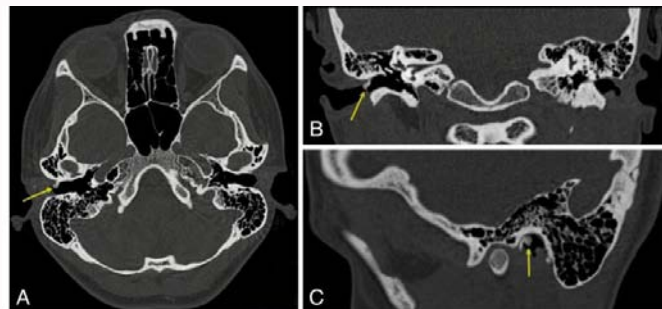
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**Figure 1:** Photograph of a right external auditory canal exostosis in 15-year-old female. The exostosis (yellow arrows) is seen arising from, and partially obstructing, the anterosuperior region of the bony external auditory canal. The tympanic membrane (white arrow), partly visualised medial to the exostosis, is normal.



**Figure 2:** High-resolution computed tomography of the petrous temporal bones in a 15-year-old female. Selected (A) axial slice with (B) coronal and (C) sagittal reconstructions demonstrate a bony exostosis (yellow arrow) arising from the anterosuperior tympanic portion of the right temporal bone.

## Learning Points

1. Surfer's exostoses are more commonly seen in individuals who frequently participate in aquatic activities<sup>3</sup> and are caused by repeated exposure to cold water and wind.
2. The main differential diagnosis is an osteoma.
3. Many patients can be managed conservatively. Surgical removal of external auditory canal exostosis can be challenging.

## References

1. Altuna Mariezkurrena X, Vea Orte JC, Camacho Arrioaga JJ, Algaba Guimera J. Surgical treatment of exostosis in the external auditory canal. *Acta Otorrinolaringol Esp*. 2006;57(6):257-61.
2. Whitaker SR, Cordier A, Kosjakov S, Charbonneau R. Treatment of external auditory canal exostoses. *Laryngoscope*. 1998;108(2):195-9.
3. Wong BJ, Cervantes W, Doyle KJ, Karamzadeh AM, Boys P, Brauel G, et al. Prevalence of external auditory canal exostoses in surfers. *Arch Otolaryngol Head Neck Surg*. 1999;125(9):969-72.