

Surfers Ear

Surfer's ear is the common name for an [exostosis](#) or abnormal bone growth within the ear canal. Surfer's ear is not the same as [swimmer's ear](#), although infection can result as a side effect.

Irritation from cold wind and water exposure causes the bone surrounding the ear canal to develop lumps of new bony growth which constrict the ear canal. The condition is so named due to its prevalence among cold water [surfers](#). Cold water surfers experience surfer's ear at about six times the rate of warm water surfers.

The condition is not limited to surfing and can occur in any activity with cold, wet, windy conditions such as [kayaking](#), [sailing](#), [jet skiing](#), and [diving](#). Most avid surfers have at least some mild bone growths (exostoses), causing little to no problems. The condition is progressive, making it important to take preventative measures early, preferably whenever surfing.

Etiology

The majority of patients present in their mid 30s to late 40s. This is likely due to a combination of the slow growth of the bone and the decreased participation in activities associated with surfer's ear past the 30's. However surfer's ear is possible at any age and is directly proportional to the amount of time spent in cold, wet, windy weather without adequate protection.

The normal ear canal is 7-12mm in diameter (about the width of a pencil). As the condition progresses the diameter narrows and can even close completely if untreated, although sufferers generally seek help once the passage has constricted to 0.5-2mm due to the noticeable hearing impairment. While not necessarily harmful in and of itself, constriction of the ear canal from these growths can trap debris, leading to painful and difficult to treat [infections](#).

Symptoms

In general one ear will be much worse than the other due to the prevailing wind direction of the area surfed or the side that most often strikes the wave first.

- [Decreased hearing or hearing loss](#), temporary or ongoing
- [Increased prevalence of ear infections](#), causing ear pain
- Difficulty evacuating debris or water from the ear causing a plugging sensation

Treatment

Surgeries to remove the obstructing ear canal bone are usually performed under general anesthesia in an operating room and aided by the use of a binocular microscope. Most ear surgeons use a drill to remove the bone and may approach the area directly via the ear canal or by making an incision behind the ear and dissecting the ear forward. In using a drilling technique it is important to keep the thin inner ear canal skin away from the drill to preserve the skin and allow optimal skin coverage at the conclusion of the surgery.

Some doctors now prefer to use 1 millimeter chisels to remove the obstructing bone and enter directly through the ear canal. This technique enhances skin preservation. This technique also allows for surgeries to be conducted under sedation with local anesthesia.

During recuperation from surgery it is extremely important not to expose the ear canal to water to minimize the chance of infection or complications.

Depending on the condition of the ear canal and the surgical technique used, the ear canal may require several weeks to several months to heal.

Unprotected exposure of ear canals to cold water and wind after treatment can lead to regrowth of bone and the need for repeated operations on the same ear.

Prevention

The widespread use of wetsuits has allowed people to surf in much colder waters, which has increased the incidence and severity of surfer's ear for those that don't properly protect their ears.

- Avoid activity during extremely cold or windy conditions.

- Keep the ear canal as warm and dry as possible.
 - [Ear plugs](#)
 - [Neoprene](#) hood
 - [swim cap](#)

References

1. [^](#) Wong, B; et al. (1999). "Prevalence of external auditory canal exostoses in surfers". *Archives of Otolaryngology, Head and Neck Surgery* **125**: 969–972.
 2. [^](#) [a](#) [b](#) Kroon, David F.; et al. (2002). "Surfer's ear: External auditory exostoses are more prevalent in cold water surfers". *Otolaryngology - Head and Neck Surgery* **126** (5): 499–504. [doi:10.1067/mhn.2002.124474.PMID 12075223](#).
 3. [^](#) Hetzler, MD, Douglas. "[Relief for Surfer's Ear](#)". Palo Alto Medical Foundation.
 4. [^](#) Whitaker, Samuel; et al. (1997). "Treatment of External Auditory Canal Exostoses". *The Laryngoscope* **108** (2): 195–199. [doi:10.1097/00005537-199802000-00007](#). [PMID 9473067](#).
- Mariezkurrena, X. Altuna; et al. (2004-08-24). "[Prevalence of Exostoses Surfers of the Basque Coast](#)" (PDF). Servicio de Orl. Hospital donostia, San Sebastian. "The objective of this study is to determine the prevalence of exostoses in a population of surfers of the Basque Coast"
 - Samy, MD, Ravi N; et al. (2006-05-30). "[External Ear, Benign Tumors](#)". [eMedicine](#), [WebMD](#).