KERATOSIS OBTURANS

The skin of the eardrum and the external auditory canal has the unique ability to migrate off the drum, then along the canal towards the exterior, carrying wax and any debris with its movement. This migratory action is intended to prevent the build-up of matter in the deep canal, deafening the ear. In some instances, the mechanism fails, resulting in accumulation of dead skin, either on the drum or along the floor of the canal, forming a pattern called a **keratosis obturans**.

![Keratosis Obturans: Persistent dead skin accumulation in the ear canal](image)

**Characteristics:**

With time, dead skin (keratin) accumulates on the floor of the canal (but not on the upper reaches). The process is silent, usually asymptomatic, and may cause problems only with complete occlusion of the canal. The accumulation excites a low grade irritation and resorption of the floor of the canal, leading to a scalloped-out erosion of the deep canal. Active infection intervenes, causing inflammation, raw tissue eruption (granulation) and bone infection. The last may cause extensive infiltration into the bone of the floor of the canal, dissolving bone, and causing a deep canal pit full of dead bone spicules (external canal osteitis, benign necrotising otitis externa).
Treatment:

The problem is often noted as waxy debris in the canal, the extent of underlying bony erosion being obscured. Syringing fails to dislodge the keratin mass. Specialist care is usually then sought. Removal of the dead skin is often time consuming, as the matter is too tough to clear by suction toilet, but too friable to easily clear with fine instruments. Piecemeal removal gradually clears the problem, perhaps with discomfort, as the debris may be somewhat adherent to the drum or canal wall.

Once cleared, the debris tends to re-accumulate gradually, necessitating re-cleaning on a six or twelve monthly long term basis, particularly if the skin forms a hard scale over the drum itself. Fortunately, regular cleaning keeps the problem and its complications in abeyance.

More information:

Keratosis Obturans