CHRONIC EARDRUM PERFORATION

(CHRONIC OTITIS MEDIA)

Chronic perforations (Middle Ear Infections) of the eardrum may occur under several circumstances. Single severe bacterial or fungal infections may be the cause. Infected trauma penetrations may fail to heal. Drums weakened by chronic Eustachian tubal failure are prone to breakdown. Other debilitating conditions, chronic general ill health, or radiation may also contribute. The condition is particularly prevalent in indigenous communities where health, hygiene and primary care may be suspect.

Chronic Otitis Media: Perforated eardrum.

Characteristics

Drum perforations (Chronic Otitis Media) range from pinpoint to complete loss of the drum, and are often associated with other middle ear problems. Scarring, fixation or breakdown of the tiny ossicles of the middle ear is a common accompaniment, causing marked hearing loss due to impaired sound transmission. With time, the fine moist linings of the middle ear may become thickened and fibrosed or even calcified, causing further loss. Chronic infection frequently intervenes, perhaps causing intractable discharge due to infection of the mastoid bone behind the ear, which will respond only to surgical clearance. Infection may also extend on
to the surface of the drum or the deep external canal as chronic myringitis (a non-healing chronic ulcerative change) that also demands surgical clearance.

Frequently, gradual nerve damage intervenes, possibly due to toxins in the infected middle ear. This is not surgically reparable.

When a chronic perforation results from longstanding malfunction of the middle ear ventilation from the nose via the Eustachian tube, repairing the drum may not restore hearing, as the middle ear remains fluid-filled in such cases.

Also, drum perforations may be associated with cholesteatoma formation. This occurs when a collapsed drum breaks down. The collapsed drum may simultaneously lose its normal ability to self-clean, leading to a mass of dead and infected skin in the middle ear (cholesteatoma). In these cases, thick infected tissue (polyps) forms in the deep canal, discharging a foul-smelling or bloodstained fluid.

Treatment

Hearing aids tend to exacerbate infection if a drum perforation is present, as the aids tend to occlude the external canal, causing humidity and optimal infection conditions.

Being prone to hearing loss, recurrent or chronic infections and other difficulties, non-healing chronic perforations are therefore best served by surgery. This will seek to repair the eardrum (myringoplasty), rebuild the hearing (ossiculoplasty), or to surgically remove diseased tissue from the mastoid (mastoidectomy). In expert hands, eardrum repair has a high success rate, but restoration of hearing will depend on the extent of middle ear damage, and the presence of good Eustachian tube function.

More on the Perforated Eardrum

- Chronic Otitis Media
  - Central Perforations
  - Anterior Perforations
  - Posterior Perforations
  - Total/Sub-total Perforations
  - Other