

OTORRHOEA

Dr Rory Attwood, ENT Department, Tygerberg Hospital

Otorrhoea can be defined as *discharge from the ear* and may originate from the **ear canal** or the **middle ear**.

It is often associated with **hearing loss** and there is frequently no pain associated. There is a spectrum of discharge, ranging from soft wax (yellow/white and mistaken for pathological discharge) through clear, mucoid and frankly purulent fluid that may have an offensive odour.

Causes

*Click for Table 1
“characteristics of otorrhoea“*

External ear canal

- **Acute otitis externa**
 - otalgia predominates
 - otorrhoea is common
- **Dermatitides**
 - psoriasis
 - eczema
- **Chronic otitis externa**
 - often bilateral and painless
 - relapsing
 - canal skin thick and easily traumatised
- **Furunculosis**
 - throbbing pain (SEVERE)
 - seropurulent discharge when abscess ruptures

Middle ear

- two main types, both causing otorrhoea and hearing loss and invariably associated with tympanic membrane (TM) defect
- otalgia is often not a feature

- **Chronic suppurative otitis media (tubotympanic)**
 - acute otitis media causes TM rupture resulting in mucopurulent discharge
 - if inflammation persists and TM fails to heal, perforation remains (usually in the *pars tensa*) and there is recurrent mucoid discharge.
- **Chronic suppurative otitis media (attico-antral)**
 - long-standing Eustachian tube dysfunction may result in TM retraction or perforation in the attic region
 - associated with cholesteatoma and scanty, offensive otorrhoea
 - hearing loss often marked
 - bone erosion may occur and involve middle or posterior cranial fossae with resulting intracranial complications

- **Discharging mastoid cavities**

- following mastoid surgery, some patients experience persistent otorrhoea

click for Table 2
“persistently discharging mastoid cavities”

- **Fractured temporal bone**

- hearing loss
 - perforated tympanic membrane / blood in middle ear
 - ossicular chain disruption
 - fracture involves cochlea

- otorrhoea
 - blood
 - csf

- **Otorrhoea after grommets**

- grommets may become infected, producing mucoid otorrhoea

- swimming
 - controversial

Management

- Carefully examine discharge - appearance and odour may give diagnosis
- Integrity of tympanic membrane must be assessed

External ear

- systemic or topical antibiotics as appropriate
- toilette to remove **all** debris
- 1% hydrocortisone cream to control dermatitis

Middle ear

- conservative treatment with toilette and topical antibiotic drops is effective in most cases unless:
 - cholesteatoma is present, requiring surgery

Fractured temporal bone

- otorrhoea usually resolves spontaneously
- antibiotic use controversial

Grommets

- mop / suction and instil antibiotic drops
- “pump” tragus to allow drops to penetrate middle ear
- persistent otorrhoea - ? remove grommets ?