OTORRHOEA

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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.

Click for Table 1
"characteristics of otorrhoea"

Causes

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 ?