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.

**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?