

# Atlas of pictures

## Outer ear

1. Haematoma of the auricle
2. Otitis externa
  - Acute
    - i. Localised (fununculosis)
    - ii. Generalised (swimmer's ear)
    - iii. Chronic
    - iv. Eczema/psoriasis
  - BEWARE! Malignant otitis externa
3. Cellulitis of the auricle
4. Perichondritis of the auricle
5. Preauricular sinus
6. Exostosis

## Haematoma of the auricle

Blunt trauma to the ear, often with associated shearing injury may result in blood collecting between the perichondrium and the cartilage. The cartilage receives its nutrition from the perichondrium. The haematoma may cause necrosis of the cartilage if not drained promptly.

Frequently seen in rugby players, wrestlers, and boxers.

These patients should be referred urgently to an ENT specialist for drainage.



Acute perichondrial haematoma of the anterior (top) and posterior (bottom) part of the auricle.



Long-term consequences of delayed treatment – progressively worsening deformity of the auricle.



## Otitis externa

Otitis externa is inflammation of the outer ear canal, with or without involvement of the auricle.

The inflammation is most commonly caused by an infection but there are other causes.

The most common bacterial infections are *Staphylococcus aureus* and *Pseudomonas aeruginosa*.

**BEWARE!!** Of elderly diabetic patients who have a dull, boring pain in their ear. They may or may not have otorrhoea (ear discharge). Granulation tissue in the ear canal is common. There may be cranial nerve weakness or hearing loss. These patients may have an invasive infection that involves the skull base (an osteitis). This is caused by *Pseudomonas aeruginosa* and is called malignant otitis externa.

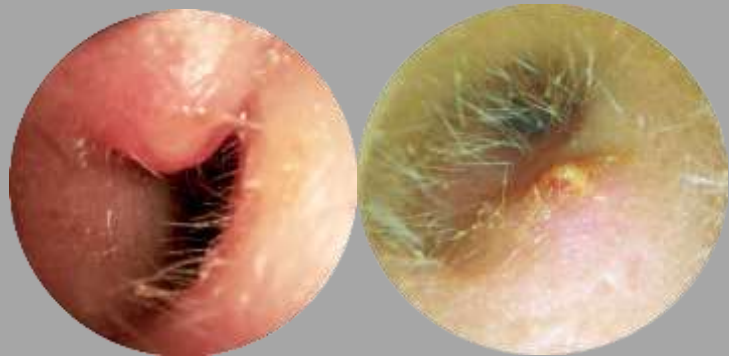


### *Acute otitis externa*

**Localised** infection = furunculosis of the external auditory canal (EAC). Consists of a small localized infection involving the hair follicle. Occurs in the outer 1/3 of the canal, where the hair follicles are located.

Treatment: analgesia, warm compresses, oral flucloxacillin

If there is concern about an associated abscess, refer to an ENT specialist for incision and drainage.



**Generalised** infection of the external auditory canal, often called "swimmer's ear". Polymicrobial infections are common. Fungal involvement is uncommon in primary acute otitis externa (AOE) but may be more common in chronic otitis externa or after treatment of AOE.

Treatment: analgesia, topical quinolone antibiotic drops

Refer to an ENT specialist if it does not resolve after treatment. Also refer to an ENT specialist if AOE is recurrent.



linked to chronic otitis externa



*Chronic otitis externa* lasts for more than 3 months. It may be fungal, other more common causes include psoriasis and eczema.

Most these patients should be referred to an ENT specialist. If a patient is atopic (allergic) and has eczema, consider a trial of topical corticosteroid treatment prior to referral.

## Cellulitis of the auricle

Usually caused by *Staphylococcus aureus*. Superficial skin infection. Anatomy of the auricle is preserved. It may occur as a complication of acute otitis externa, eczema, psoriasis, or an insect bite.

Treatment: analgesia, oral flucloxacillin, review after a few days and refer to ENT specialist if no response to treatment or if deterioration in condition.



## Perichondritis of the auricle

Auricle perichondritis is a deeper soft tissue infection involving the perichondrium. Inadequate treatment will result in deformity of the pinna (auricle). May be caused by piercings of the pinna.

Treatment: start intravenous ciprofloxacin (fluoroquinolone), with/without cloxacillin; analgesia and urgent ENT specialist referral.



## Preauricular sinus

A preauricular pit is a common birth defect that may be noticed during examination. It appears as a tiny skin-line hole or pit, usually just in front of the upper part of the ear, where the rim joins the face.

It may be unilateral or bilateral. Unilateral preauricular sinuses don't require further investigation.

In patients with bilateral preauricular sinuses, look carefully for similar pits in the neck – along the anterior border of the sternocleidomastoid muscle. If present – refer to an ENT specialist. Also, send these patients for hearing screening and perform a urine dipstick. If either are abnormal – refer to an ENT specialist. Bilateral preauricular sinuses may be associated with a syndrome.



A preauricular sinus with no inflammation of the surrounding skin. Requires no intervention.

## Exostosis

A slowly progressive disease caused by bony, benign, hyperostotic outgrowths of the medial aspect of the EAC. Caused by repeated exposure to cold water and is often referred to as "surfer's ear".

Patient's may present with repeated acute otitis externa. The end stage of the disease results in hearing loss.

Does not require referral if asymptomatic but refer to an ENT specialist if symptomatic.

