

OTITIS EXTRENA

Dr Haider Alsarhan

Definition: Its inflammatory conditions of the external meatal skin, it may arise primarily in the meatus or be a manifestation of a generalized skin condition.

Predisposing factors:

- 1- Genetic: as narrow canal, excessive wax, inherited tendency to eczema.
- 2- Environmental: as heat, humidity, swimming.
- 3- Traumatic: as scratching the ear by matchsticks, etc.
- 4- Infective: as viral, bacterial, fungal.
- 5- Reactive: as eczematous dermatitis, seborrhoeic dermatitis, neurodermatitis.

Classifications (types):

1- Furunculosis:

It's a staphylococcal infection of a hair follicle in the cartilaginous part of the external auditory canal, result in red tender swelling, and the pain is aggravated by pulling the auricle, with pre and post-auricular lymph node enlargement, treatment include: local heat, systemic anti-staph antibiotics, packing the canal with a gauze strip soaked with glycerin ichthyol 10%(glycerin is hygroscopic i.e. decreases edema) or antibiotic drops, while incision should be avoided.



2- Diffuse otitis externa:

The predisposing factors are heat, humidity, bathing, and local trauma as scratching the ears which result in abrasions in the meatal skin and these will provide access for the causative organisms, or secondary to

an underlying chronic suppurative otitis media (CSOM), the most common organisms are *Pseudomonas aeruginosa*, *Bacillus proteus* and *Staphylococcus aureus*. Clinically initially there is pain in acute stage with red swollen meatal skin, followed by irritation in the ear in chronic stage with accumulation of debris in the canal, with thickening of the meatal skin, and reduced its lumen that's lead to deafness, the treatment include: careful clearance of the debris, local ear drop (Antibiotics with steroid), Pope's ear wick impregnated with (Antibiotics, Antiseptics, and steroid) in case of marked meatal swelling.



3- Otomycosis:

Its fungal infection of the external meatus , the most common were *Candida Albicans*, and *Aspergillus Niger* fungi, there is marked irritation in the ears, with accumulation of grayish- white debris in the meatal canal, resembling wet newspaper, and if the infection is due to *Aspergillus Niger*, there will added black specks in the debris, the treatment included: Avoid the water to enter the ear, meticulous suction clearance of the debris, Anti- fungal local application, as Nystatin for *Candida*, and Econazole for *Aspergillus* infections.



Otomycosis due to *Candida Albicans*



Otomycosis due to *Aspergillus Niger*

4- Otitis externa haemorrhagica: It's also called (bullous myringitis)

This is a viral infection due to Influenza virus, characterized by purple (haemorrhagic) vesicles on the tympanic membrane and the deep meatus, with severe pain and then serosanguineous discharge, where the pain is not relieved by the onset of discharge, the treatment consists of prescribing analgesic for the pain, keeping the ear clean and dry, Antibiotics are of no help, and the vesicles should not be incised.



5- Malignant otitis externa:

It's a severe progressive infection which starts in the deep part of the external meatus and then rapidly will involving the temporal bone and the adjacent soft tissues, it occurs in elderly poorly controlled diabetics and in immune- compromised patients, the infecting organism is *Pseudomonas aeruginosa*, clinically there is severe pain in the ear, and a granulation tissue seen in the deep meatus, then the infection will spread to the base of the skull, and adjacent soft tissue with cranial nerves palsy, specially the 7th nerve, the treatment consist of systemic intravenous anti- *Pseudomonas* Antibiotics up to 3 months, with surgical removal of the necrotic tissues and sequestered bones, as well as control of the diabetus mellitus, and improve the general condition of the patient.



6- Herpes Zoster Oticus: It's called (Ramsey Hunt syndrome)

There is a herpetic eruption occur in meatal skin, tympanic membrane, auricle that's appears as rash of small tense blisters with surrounding erythema, the lesion is also found in the buccal mucosa, and the palate, etc, it preceded by pain the ears for several days, also it associated with facial nerve palsy and sensorineural hearing loss, and vestibular disturbance.



7- Eczematous dermatitis:

It is the result of the sensitization of the meatal skin either by allergenic material as local ear Antibiotic application mainly (neomycin) or from infecting organisms, clinically there intense irritation, with formation of vesicles and serous ear discharge when these vesicles ruptured.

8- Seborrhoeic dermatitis:

There is scaling in the external auditory canal, and post-auricular sulcus, it associated with scaling of the scalp (dandruff), treatment by using of cetrimide shampoo, and ear clearance.



9- Neurodermatitis:

There is constant scratching of the ears due to psychosomatic disturbance results into irritation of the external meatus which may lead to secondary infection, the management include attention must be paid to the psychosomatic aspect of the problem, also local application of steroid preparation, and in severe cases it may necessary to bandage the ears to prevent scratching.