DEFINITION

1. Otitis externa is the term applied to inflammation of the external ear. The inflammation may be confined to the external auditory canal or involve, in addition, the auricle and surrounding skin.

CLASSIFICATION

- 2. Although it may sometimes be difficult to place individual cases in a particular category, the following classification provides a useful guide -
 - 2.1. Infective
 - 2.1.1. bacterial
 - 2.1.2. fungal
 - 2.1.3. viral
 - 2.2. Reactive
 - 2.2.1. eczema
 - 2.2.2. seborrhoeic dermatitis
 - 2.2.3. psoriasis

CLINICAL MANIFESTATIONS

3. INFECTIVE OTITIS EXTERNA

- 3.1. In the acute stage, the early symptoms are tenderness in the **meatus** (the opening of the ear canal) and pain which is made worse by movements of the jaw.
- 3.2. As the condition progresses, the pain becomes more intense and the meatus may become blocked by swelling which may produce temporary deafness. In severe cases, the swelling may spread posteriorly, producing forward displacement of the **auricle** (the outside portion of the ear).
- 3.3. Eventually, there is discharge of pus and, if the lesion is circumscribed, the condition rapidly resolves. When the infection is diffuse, the skin lining the meatus may flake, forming a mass of debris and a chronic stage may ensue which is characterised by irritation and intermittent discharge. Such a mass may produce a temporary deafness.

4. REACTIVE OTITIS EXTERNA

4.1. The main symptom is usually a sense of burning or itchiness in the ear which varies in intensity from time to time. This is commonly associated with scaling and crusting of the meatus or watery discharge when vesicle formation is a feature. Relapses are common and scratching may lead to secondary infection. Swelling and debris may, as in the infective variety, produce temporary deafness.

AETIOLOGY

5. INFECTIVE OTITIS EXTERNA

- 5.1. **Bacterial** infections are usually caused by **staphylococci**, **B. Pyocyaneas** and **B. Proteus**.
- 5.2. **Fungal** infections are usually found to be a secondary invasion of primary bacterial infection, leading to chronicity. Those fungi usually responsible are **Aspergillus** and **Candida**.
- 5.3. **Virus** infections may give rise to herpetic eruptions. A form of acute otitis externa common in influenza is believed to be due to an influenza virus.

6. REACTIVE OTITIS EXTERNA

- 6.1. The external ear is commonly involved in all forms of constitutional **eczema** affecting the face and neck. An eczematous reaction involving the meatus may also arise as a result of sensitisation of the skin cells, such sensitisation being brought about by the actual infecting organisms or this being by far the commonest cause by local application of antibiotics, especially Penicillin and Chloromycetin used in the treatment of otitis media or infective otitis externa. Other external agents which may be responsible for sensitisation include clothing, jewellery, cosmetics, detergents and industrial chemicals.
- 6.2. **Seborrhoeic dermatitis** of the meatus arises almost invariably as an extension of seborrhoeic dermatitis of the scalp. Secondary infection is common and is brought about by scratching.

7. OTHER FACTORS

- 7.1. Otitis externa has received a variety of names in the past, emphasising its frequent occurrence in hot and humid climates. For example, **Tropical Ear, Singapore Ear, Hong Kong Ear**. However, otitis externa is widely encountered in all climates.
- 7.2. Although heat, humidity and bathing are aggravating factors in some cases, especially in the presence of fungal infections, experts on the subject unanimously agree that local trauma is the most important factors leading to infection. Scratching of the ears and vigorous drying with a dirty towel are two of the ways in which minor abrasions of the meatal skin may be produced, thus allowing entrance of the causative organisms.

7.3. Many cases are secondary to an underlying otitis media and, here again, the meatus becomes infected through scratching or vigorous cleansing.

CONCLUSION

8. **Otitis externa** is a condition in which infection, local trauma, physical agents and sensitisation play varying roles in the aetiology and course.

REFERENCES

Hammond V. Diseases of the External ear. In: (Eds) Booth J B, Kerr A G and Groves J. Scott-Brown's Otolaryngology. London. Butterworths. 5th Ed. Otology. 1987;3:156-171.

Wilkinson J D. The External Ear - External otitis. In: (Eds) Champion R H, Burton J L and Ebling F J G. Textbook of Dermatology. Oxford. Blackwell Scientific Publications. 5th Ed. 1992:2679-2683.

December 1992