Malignant external otitis in diabetics: about 16 cases

E. Niyogushima, J.R. Ekoundzola, S. Rafi, G. El Mghari, N. El Ansari.
Department of Endocrinology Diabetology Metabolic Diseases and Nutrition
CHU Mohamed VI Marrakech

Background:

Malignant otitis externa (MOE) or osteomyelitis of the skull base is made by damage to soft tissue, cartilage and bone beyond the integument of the external auditory canal, often caused by Pseudomonas Aeruginosa.

Objective:

The aim of this study was to investigate clinical, paraclinical data and factors associated with malignant otitis externa among diabetics.

Materials and methods:

This is a retrospective study of 16 diabetics with MOE at the Mohammed VI University Hospital. Characteristics studied are linked to the population, diabetes, triggering factors and paraclinical examinations.

Resultants:
Average age of the population is 58. Predominantly female, sex ratio of 2.2.
Average duration of diabetes of 8.9 years. Average HbA1c of 10.9%. Two cases of diabetic retinopathy and 6 cases of diabetic nephropathy reported. Degenerative assessment never undertaken in 8 cases. Contributing factors were a history of otitis externa in 43.75%, local corticosteroids in 31.25% and maceration in 25%. Otoscopy revealed narrowed ear canal in 15 cases, Granulation tissue in 14 cases, an invisible eardrum in 12 cases. Pseudomonas, staphylococcus and acinobacter were isolated. Average length of hospital stay 3.1 weeks.

Conclusion :
Pathophysiology of MOE in diabetics includes microangiopathy, hypoperfusion and altered neutrophil chemotaxis.
Otalgia and otorrhoea are the most common. MOE is severe disease with cranial nerve damage and sinus thrombosis. Pseudomonas Aeruginosa is most frequently isolated in literature.
MOE is an invasive infection with a high morbimortality rate in diabetics.
Strict glycaemic control promotes tissue revascularisation and healing lesions.

Keywords:
Malignant otitis externa, diabetis, Pseudomonas Aeruginosa, invasive infection.