

## Mycetoma:-

\* Mycetoma is a chronic granulomatous, progressive inflammatory disease that involves the subcutaneous tissue after a traumatic inoculation of the causative organism.

\* It may be caused by true fungi or by higher bacteria and therefore it is classified into eumycetoma and actinomycetoma, respectively.

\* Mycetoma is a chronic subcutaneous infection caused by actinomycetes or fungi.

\* This infection results in a granulomatous inflammatory response in the deep dermis and subcutaneous tissue, which can extend to the underlying bone.

\* Mycetoma caused by microaerophilic actinomycetes is termed actinomycetoma, and mycetoma caused by true fungi is called eumycetoma.

## Presentation of mycetoma:-

\* The characteristic triad of a painless subcutaneous mass, sinuses and the discharge of grains is pathognomic of mycetoma.

\* The lesion usually presents as a slowly progressive painless swelling at the site of previous trauma and gradually increases in size.

\* It may spread to involve the skin and deep structures resulting in destruction of bone, deformity and loss of function.

## Madura foot:-

\* Madura foot is a chronic granulomatous infection of the bones and soft tissues of the foot resulting in mycetoma formation and gross deformity.

\* A common causative organism is *Actinomyadura madurae*, but madura foot is also caused by other actinomycetes including *Streptomyces somaliensis* and by fungi.

## Aetiological Agents of mycetoma:-

\* More than 20 species of fungi and bacteria can cause mycetoma.

\* The ratio of mycetoma cases caused by bacteria (actinomycetoma) to those caused by true fungi (eu mycetoma).

## Mycetoma lesions:-

\* Lesions on the chest and back are frequently caused by *Nocardia* species, whereas lesions on the head and neck are usually caused by *Streptomyces Somaliensis*.

## Pathogenesis:-

\* The causative organism enters through sites of local trauma.

\* A neutrophilic response initially occurs, which may be followed by a granulomatous reaction.

\* Spread occurs through skin facial planes and can involve the bone.

\* Haematogenous or lymphatic spread is uncommon.

Eumycetoma :-

\* Eumycetoma is mainly caused by *P boydii* or *Madurella mycetomatis*.

Treatment of Mycetoma :-

\* The treatment of mycetoma depends mainly on its aetiological agent and the extent of the disease.

\* Until recently, in many centres the only available treatment for mycetoma was amputation or mutilating surgical excision of the affected part.

\* Actinomycetoma is amenable to medical treatment with antibiotics and other chemotherapeutic agents.