

Mycetoma Pedis - The Importance Of Histological Diagnosis: A Case Series

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INTRODUCTION:

Mycetoma pedis (Madura foot) is a chronic foot infection caused by bacteria or fungi. It is endemic in tropical area with low prevalence. Clinical manifestations include triad of chronic induration, draining sinuses and discharging granules.

CASE REPORT 1:

64-year-old gentleman complained of right foot swelling and pain for 7 months. Clinically an 10x8cm indurated mass was noted over plantar aspect of right foot with multiple serous draining puncta. MRI suggestive of fibromatosis. Excision revealed fibrous mass invading muscles and tendons. Histopathological study showed abscess with actinomycetes like colonies. Final culture no growth.

(Figures 1 and 2)

CASE REPORT 2:

55-year-old lady presented with left foot progressive swelling for 10 years with pain. Clinical examination revealed solitary swelling over dorsum left foot (4x5cm) with blackish discolouration. No discharge seen. MRI suggestive of venous malformation. Excision done showing fibrous mass with minimal pus. Histopathological study showed fungal infection consistent with culture result – *Exophiala jeanselmei*.

(Figure 3)

DISCUSSIONS:

Mycetoma is a tropical chronic infection commonly affecting the foot (70%) following minor trauma. The causative agents could be either bacterial (actinomycetoma-60%) or fungal (eumycetoma-40%) in origin. MRI is widely accepted in establishing the diagnosis of mycetoma through a highly specific “dot-in-circle” appearance. However, from our observation its reliability is doubtful as the MRI features could mimic soft tissue tumours such as

fibromatosis and arteriovenous malformation. Histopathological study typically revealed granulomatous inflammation with microabscesses containing granules. Gram stain is helpful to distinguish actinomycetoma from eumycetoma.



Figure 1: clinical appearances of pedal mycetoma preoperatively and intraoperatively

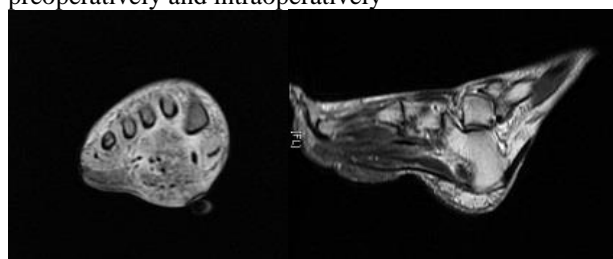


Figure 2: MRI showed heterogenous enhancing solitary fibrous soft tissue mass over plantar aspect

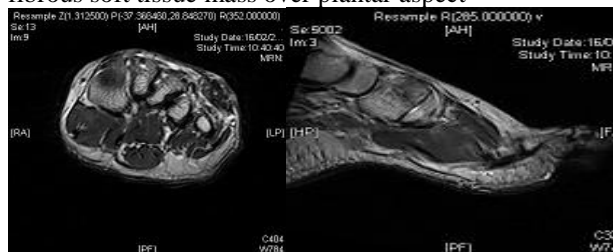


Figure 3: MRI showed serpiginous lesion over dorsum with septations and intralesional blood and veins

CONCLUSION:

MRI is useful to outline the extension of lesion. However, histological study remained the gold standard in diagnosing mycetoma.

REFERENCES:

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