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ASPERGILLUS INFECTION DISGUISING AS SOFT TISSUE MASS DIAGNOSED BY FNAC—A RARE CASE REPORT

Pathology

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ABSTRACT

A 55year old male diabetic patient presented with soft tissue mass on right foot for one month. The swelling was 5.5x4 cms in size and clinical diagnosis of soft tissue tumour was made. FNAC (Fine Needle Aspiration) was done using standard technique. Smears show suppurative inflammation, necrotic debris, multinucleated giant cells along with septate, slender fungal hyphae having acute angle branching with formation of fungal spores. Final diagnosis of inflammatory pathology with presence of aspergillus was given. This case report highlights that all inflammatory pathologies should be screened for fungal pathogens; also, fungal infections can present as soft tissue mass in immunocompromised individuals.

KEYWORDS

Aspergillus, FNAC, Soft tissue swelling

Case Report

A 55-year-old male diabetic patient presented with soft tissue mass on right foot for one month. Patient was diagnosed with Diabetic Mellitus two years back and was on oral hypoglycemic drugs. No History of trauma was given, initially swelling was small and gradually increased in size and reached 5.5x4 cm. It was firm and non-tender. On FNAC 20 ml of pus like fluid was aspirated and swelling collapsed. Giemsa stained smears were showing suppurative inflammation, necrotic debris, multinucleated giant cells along with septate, slender fungal hyphae having acute angle branching with formation of fungal spores (Fig 1,2 &3). KOH mount showed Aspergillus having slender septate hyphae with acute angle branching thus confirming the diagnosis.

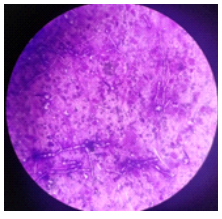

Figure 1. Smear showing necrotic debris with many septate hyphae of Aspergillus (Giemsa X100)

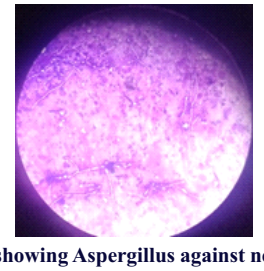

Figure 2 Smear showing Aspergillus against necrotic background (Giemsa X100)

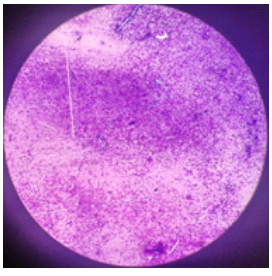

Figure 3 Smear showing dense neutrophilic infiltrate with septate hyphae and spores of aspergillus (Giemsa X100)

DISCUSSION

Aspergillosis is a wide spectrum of disease caused by fungi of genus Aspergillus.[1] Primary cutaneous aspergillosis is very rare; generally, they develop secondary to hematogenous dissemination from underlying infected organ. They are leading cause of morbidity and mortality in immunocompromised hosts.[1] It is an uncommon opportunistic infection caused by mainly Aspergillus fumigatus and Aspergillus niger.[2] it is seen as complication of severe debilitating illness and occurs in patients suffering from malignancies, tuberculosis and Diabetes. [3] However soft tissue swelling, and cutaneous involvement is very rare.[4] It arises from direct physical inoculation at or near intravenous access catheter sites, at sites of traumatic inoculation and at sites associated with occlusive dressings, burns or surgery. The initial lesion may appear in different forms including as macules, papules, nodules or plaques.[5] They constitute great diagnostic and therapeutic challenge.

Because of the potential mortality and morbidity of aspergillosis, a high level of suspicion and prompt institution of therapy is required.[6] This case report highlights that all inflammatory pathologies should be screened for fungal pathogens, also fungal infections can present as soft tissue mass in immunocompromised individuals.

CONCLUSION

Aspergillosis is opportunistic infection seen in immunocompromised host. However it presenting as soft tissue mass is very rare and is a diagnostic dilemma. Early and prompt diagnosis improves the patient outcome.

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