

# Septic Aspergillus Arthritis In A Non- Immuno-Compromised Patient.

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## Abstract

A 35 year old male presented to the Outdoor Department with pain and swelling in the right knee and difficulty to bear weight. Diagnostic investigations and culture of the tissue obtained confirmed septic arthritis due to *Aspergillus fumigatus*.

## INTRODUCTION

Fungal septic arthritis is rare and is a challenge even for an experienced clinician. We recently diagnosed a patient with septic arthritis of the knee without any systemic symptoms.

## CASE

A 35 year old man with a history of pain in the right knee for eight months was admitted in our department because of pain and swelling. The patient had a history of blunt trauma to the knee 9 months back when a wooden object fell on his knee.

After the trauma the patient was treated with analgesics and anti-inflammatory drugs and was relieved of the pain. The patient remained asymptomatic for a month and then gradually developed pain and swelling of the right knee. The patient started having difficulty in bearing weight on the right lower limb. He reported to the outdoor department of our hospital and on examination the knee had gross synovitis and the range of motion was reduced. X-ray of right knee (Fig 1) was done and was normal. Blood tests showed normal TLC and ESR. The patient was negative for HIV and was a non diabetic. MRI of the right knee was performed which showed granulomatous changes of the proximal tibia and synovium. (Fig 2a , 2b and Fig 2c)

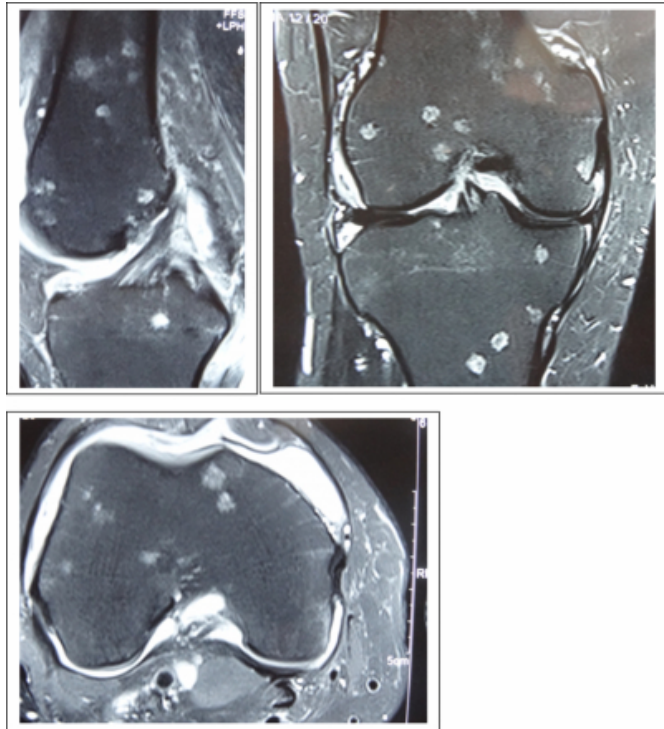
**Figure 1**

Fig 1 X-ray AP view showing no bony abnormality



**Figure 2**

Fig 2a, 2b and 2c . MRI images showing lesion of tibia and femur.

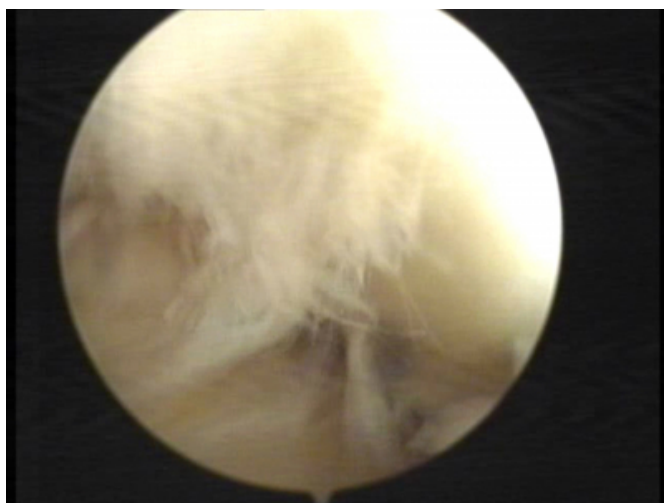


The knee was subjected to arthroscopy which showed a hypertrophied and inflamed synovium Fig 3 and a tissue of synovium was taken for evaluation. Microscopic examination of the synovial tissue showed septate hyphae growth. Fig 4

KOH mount and culture showed growth of *A. fumigatus* at 2 week.

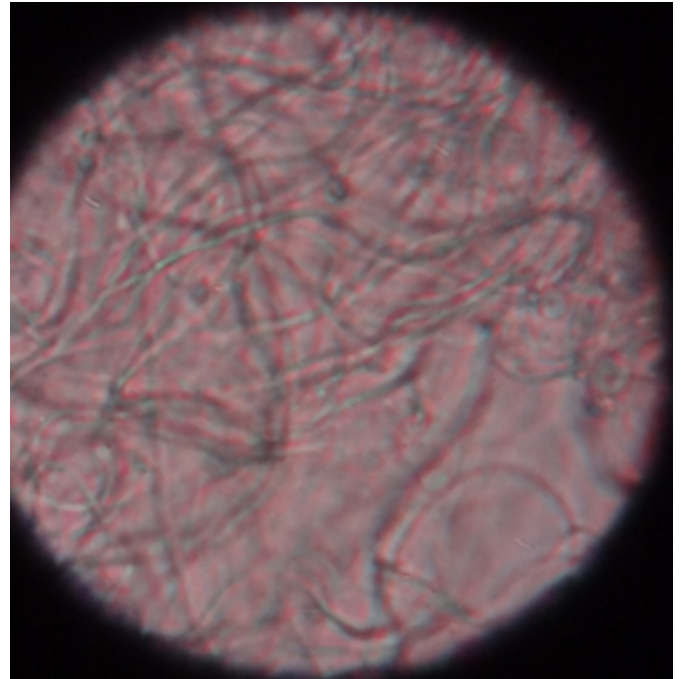
**Figure 3**

Fig 3: Arthroscopy view showing hypertrophied synovium.



**Figure 4**

Fig 4: Microscopic view of aspergillus growth over KOH mount.



The patient was put on oral tab Itraconazole 150mg twice a day for 2 weeks and then one tab /day for 6 weeks. At 6 month follow up he had no signs of synovitis and was able to carry out his daily activities.

## DISCUSSION

Septic arthritis of knee joint due to aspergillus (1,2,3) species is very rare All the few cases of fungal septic arthritis reported in literature were secondary to an underlying debilitating disease or immuno- compromise (4,5) state either due to haematological disorder or cirrhosis (6). One case of an invasive aspergillus infection has been reported secondary to direct contamination during surgery (7) or following intraarticular injection (8). A few cases have been reported in the literature where non Immunocompromised (9) and otherwise healthy individuals suffered pulmonary aspergillosis. Aspergillus osteomyelitis occurs at any age and the most common location are vertebrae and ribs (10). Our case showed involvement of the distal femur, proximal tibia and knee joint. We have reported a rare case of primary fungal arthritis caused by *Aspergillus fumigatus* in a healthy individual. To our knowledge no young non-immuno-compromised patient with fungal arthritis has been reported.

## CONCLUSION

Fungal septic arthritis is very rare and it can be found in a

non

Immuno-compromised host. One must suspect for primary fungal

infection in a bone or a joint and investigate for the same.

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