Pseudo-Septic Arthritis: A Case Report

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Introduction:

Pseudo septic arthtitis is an acute inflammatory monoarthirits. Its an inflammatory condition which poses difficulties to surgeon while trying to differentiate from septic arthritis. Synovial fluid is needed to rule out septic arthritis which eventually need an surgical intervention while pseudoseptic arthritis need to be treated with it's underlying cause.

Report:

We report a case of 46 years old gentleman with underlying diabetes mellitus, hypertension and gout presented with right knee pain and swelling for 2 days duration associated inability to ambulate. Clinical examination reveals a swollen, erythematous knee with limited range of movement. Clinically febrile with a raised white cell count of 22,000.

Our provisional diagnosis was septic arthritis hence broad spectrum antibiotic was commenced and patient was prepared for arthrotomy washout of knee joint. Diagnostic knee joint aspiration yielded 15cc of cloudy synovial fluid with pus cell >25 but negative gram stain.

In view of negative gram stain, we withhold the antibiotic and observation was continued. In view of persistent fever on day 3, repeated knee joint aspiration was done. The repeated gram stain still nil for bacteria.

We proceeded with crystal analysis and it revealed negative birefringence monourate sodium crystal.

On Day 4 of admission, clinically patient improved. Patient able to ambulate and range of movement of right knee gradually improved to normal albeit mild discomfort. He was discharged on day 6. His subsequent clinic follow up at one week and three week reveled a painless knee and full range of motion over the affected joint.

Discussion:

Pseudoseptic arthritis is an inflammatory arthritis not due to bacterial infection. It is usually a diagnosis of exclusion. Pseudoseptic arthritis Is not a self limiting disease and underlying cause need to be addressed with NSAIDs, Prednisolone, arthrocenthesis, intraarticular steroid injection. In our case, our patient symptoms improved significantly with targeted therapy with colchicine and joint aspiration. In conclusion, pseudoseptic arthritis should be kept in mind when other inflammatory condition could be a differential diagnosis. Under this circumstances, gram stain of the synovial fluid and culture can be a guide while clinically improvement of the patient can be a useful guide.

Reference:

1.Brian P et al. Pseudoseptic arthritis : a case

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