# A Novel Case of Sacroiliac Joint Septic Arthritis in a Fit & Well Marathon Runner

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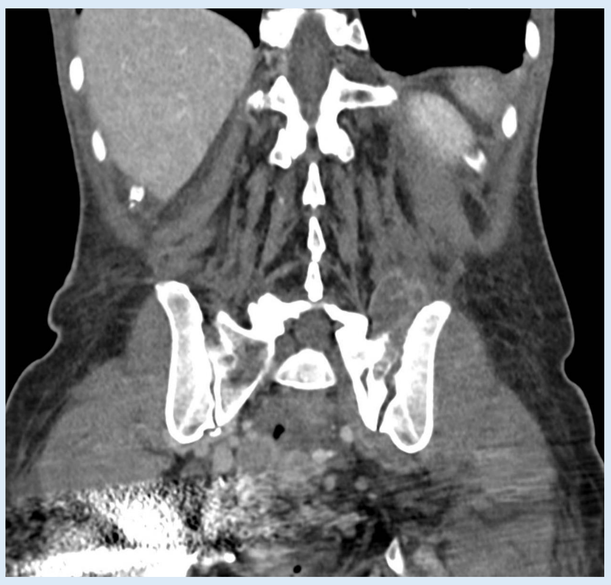
## Introduction & Aim

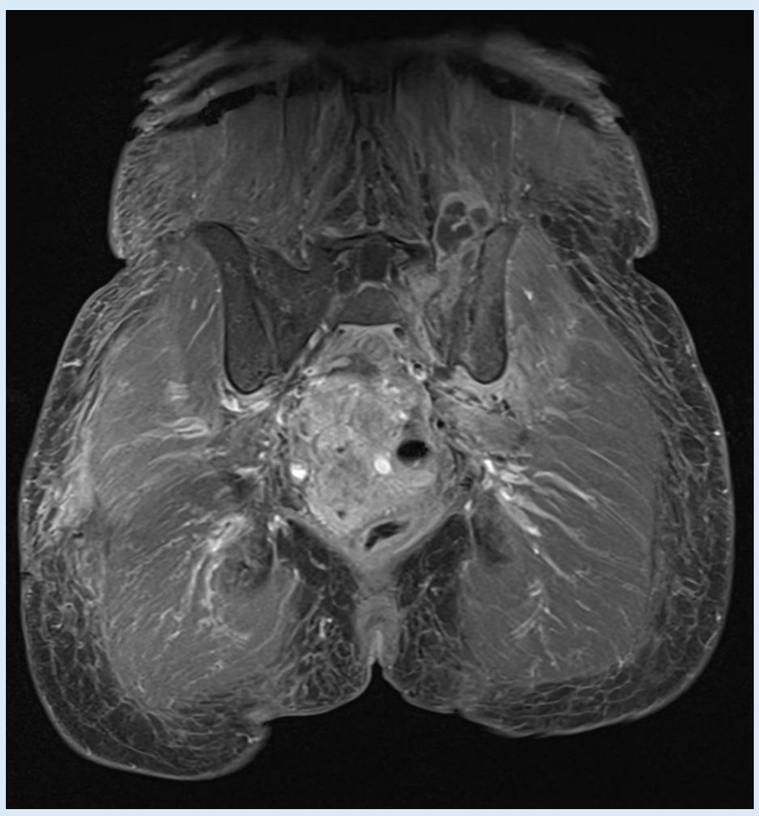
- Sacroiliac joint septic arthritis is an uncommon infection, accounting for only 1-2% of all septic arthritis cases.
- It typically presents with insidious and often misattributed symptoms which can lead to delayed diagnosis and treatment.
- Native joint septic arthritis and bacteraemia in patients with prostheses also presents the problem of surveillance and scrutiny of these joints, with a reported 7-10% overall PJI risk, rising to 20-40% in *Staph aureus* bacteraemia (1,2).
- We aim to highlight these issues faced in a case of SJSA in an otherwise healthy marathon runner.

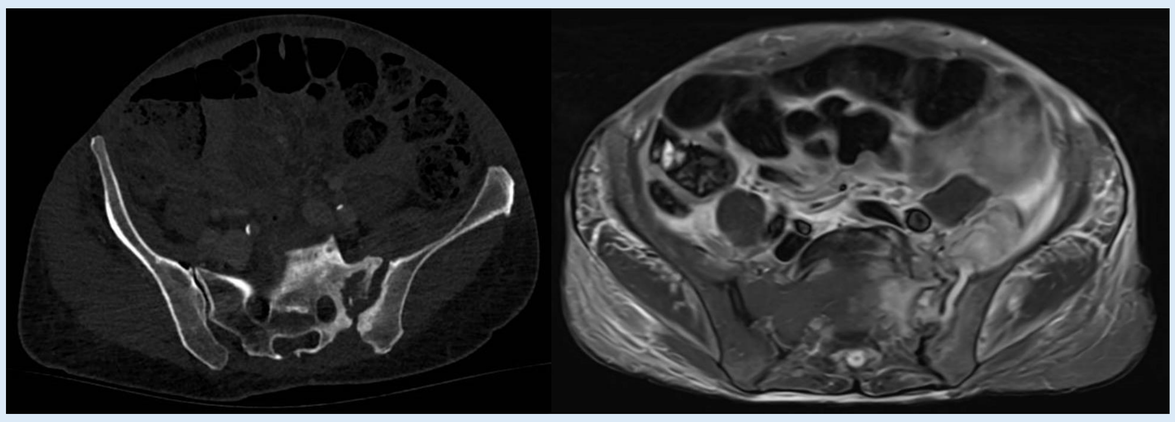
## Case Presentation

- A 66-year-old female recreational marathon runner presented with a 4 week history of atraumatic lower back/buttock pain and 1 week of associated malaise and subjective fevers.
- Previous left knee & right hip replacements, otherwise fit & well, non-smoker and non-drinker.
- On examination, tender over L groin and lower back, no pain in L knee or R hip and normal neurology.
- Blood tests in the Emergency Department revealed a CRP of 409 with WCC 21.8 (neutrophils 19.5).

CT and MRI scans confirmed destructive left sacroiliac joint septic arthritis with chronic osteomyelitic changes in the sacrum with concomitant insufficiency or pathological fractures, and collections within the left iliacus and erector spinae muscles.

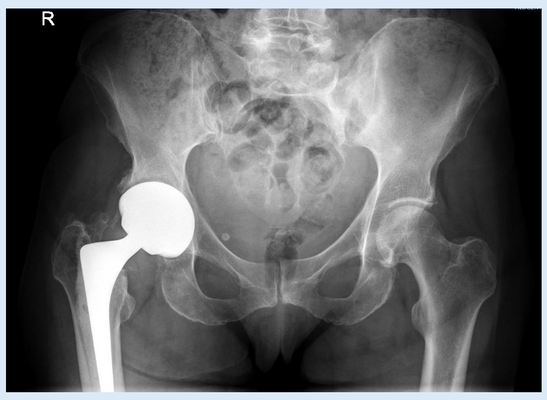


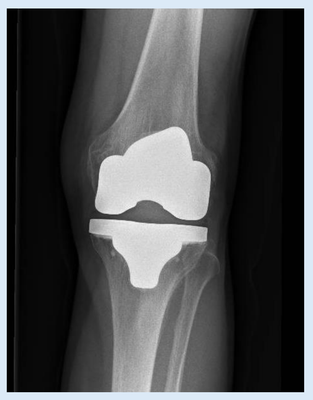




## Management & Results

- Empiric IV cefazolin was commenced.
- The patient proceeded to CT-guided aspiration of the left iliacus and erector spinae collections.
- This, as well as multiple blood cultures, grew methicillin-susceptible *Staphylococcus aureus*.
- IV cefazolin was continued for 6 weeks followed by 2 weeks of oral cefalexin and probenecid.
- TTE and TOE showed no evidence of associated infective endocarditis.
- Initial recovery was promising then 4 weeks into treatment the patient's CRP doubled from 20 to 44 prompting further investigation for prosthetic joint involvement.
- Hip and knee aspirations showed no growth and the patient remains asymptomatic with subsequent down-trending inflammatory markers.



## Discussion & Conclusions

- Otherwise fit & well patients, especially athletes, often have lower back pain attributed to mechanical/soft tissue injury.
- It is important to maintain a broad differential and consider sacroiliac joint septic arthritis as a possible diagnosis, especially in the context of systemic symptoms.
- Prompt diagnosis and antibiotic treatment is essential for good outcomes.
- IR-guided or surgical drainage of associated collections should also be considered.
- Contemporary research suggests foregoing asymptomatic prosthetic aspiration (3). However, given the morbidity/mortality associated with PJI, this remains controversial.

## References

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