

# Magnetic Resonance Imaging of Aggressive Septic Sacroiliitis – A Case Study

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## INTRODUCTION

Sacroiliitis is an inflammation of the sacroiliac joint (SI), usually resulting in pain. Often it is a diagnosis of exclusion. The sacroiliac joint is one of the largest joints in the body and is a common source of the buttock and lower back pain. It connects the bones of the ilium to the sacrum.

Sacroiliitis can be particularly difficult to diagnose because its symptoms are similar to many other common sources of back pain. It often is overlooked as a source of back or buttock pain. Pain from this condition often is due to chronic degenerative causes yet relatively uncommon.

Sacroiliitis can be secondary to rheumatic, infectious, drug-related, or oncologic sources.

## CASE REPORT

A 63 year old female complaining of pain in left hip and difficult walking.

The disease started 13 days ago with a high body temperature of 39.5 degrees and fever. She takes Panklav for 3 days. She is sweating profusely, does not vomit and has proper urination and defecation.

CT shows a thin stained bony structure of the

Some specific examples of nondegenerative conditions that can lead to sacroiliitis are ankylosing spondylitis, psoriatic arthropathy, Bechet disease, hyperparathyroidism, and various pyogenic sources (1).

Various conditions result in the inflammation of the SI joint, leading to significant pain. Pyogenic sacroiliitis is the most frequently reported cause of acute sacroiliitis. Pain can originate from the synovial joint but it can also originate from the posterior sacral ligaments

Presentation of sacroiliac pain can vary widely. Up to 50% of cases have pain radiating to the lower extremity: 6% to the upper lumbar area, 4% percent to the groin, and 2% percent to the lower abdomen (2).

left sacroiliac joint. In the caudal part of several cysts and usures measuring 0.5 - 0.7 cm. Suspicious presence of fluid in the joint.

Present imbibition and inflammation of paraarticular soft tissues with abscess collections in musculus iliacus and musculus iliopsoas.

CT shows a picture of septic sacroiliitis. Consultation with orthopedist and pelvic magnetic resonance recommended.



Picture 1. CT shows a picture of septic sacroiliitis

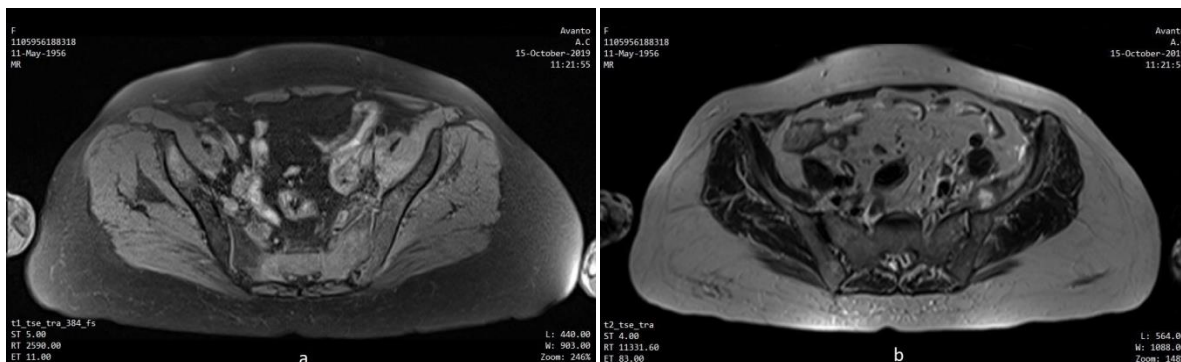
Extensive T1 hypo signal, T2 and STIR heterogeneous hyper signal present on the left side in the lateral mass at the level of the S2-S4 segment partly and in the vertebral carcasses (3). Spongiosis is largely preserved, with no evident periostosis.

The cysts and usures described on CT impose as initial sequestration of lateral S3 bone mass with a joint on a surface of about 2.5 cm. Joint

effusion of lamellar type.

Extensive imbibition and inflammation of paraarticular soft tissues with irregular abscessed collections in m. psoas and m. iliacus 1.5 to 2.8 cm in diameter.

Spreading of inflammation through sacral foramina in neural tissue. Irregular infiltration zone of the right iliac bone present, without affecting the SI joint.



Picture 2. MRI shows aggressive form of septic sacroiliitis

## CONCLUSION

MRI shows aggressive form of septic sacroiliitis on the left with additional infiltration

of the right iliac bone, possible hematogenous spread.

## REFERENCES

1. Buchanan B.K., Varacallo M., Sacroiliitis, Statpearls Publishing, 2018.
2. Kocak O, Kocak AY, Sanal B, Kulan G. Bilateral Sacroiliitis Confirmed with Magnetic Resonance Imaging during Isotretinoin Treatment Assessment of 11 Patients and a Review of the Literature. Acta Dermatovenerol Croat. 2017 Oct;25(3):228-233
3. Tosun O., Tangal G.S., Cay N., Maras Y., Ercan K., Arslan H., Contrast Enhanced Magnetic Resonance Imaging in Sacroiliitis, Iran J Radiol. e23900

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