A case of Tuberculous Sacroilitis in a young male

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Abstract

Introduction

Sacroilitis due to infective causes is an uncommon occurrence; hence the diagnosis is often delayed. Tuberculosis, Brucellosis and other organisms causing pyogenicsacroilitis like Staphylococcus aureus are the main culprits of infective sacroilitis. It is thought that 3% of all cases of Tuberculosishave some musculoskeletal involvement of which less than 10% involves sacroiliac joint.

Due to the rarity and nonspecific symptoms, TB sacroilitis can often be misdiagnosed as an inflammatory sacroilitis, Ankylosing Spondylitis. When the pain and disability do not respond to analgesics, the physicians may decide to go for Biological agents like TNF antagonists which would worsen TB sacroilitis.

Therefore it is important to be aware of TB sacroilitis and its nonspecific symptoms especially in regions with high prevalence of TB. It is prudent to look for circumstances with high risk exposure to TB in the patient's history.

We would like to present a case of a young male who was thought to have Ankylosing Spondylitis with poor response to NSAIDS. He was planned to be prescribed with TNF antagonist. However an MRI revealed that he was having infective sacroilitis which later turned out to be TB sacroilitis.

Case Report

A 32 year old male presented with buttock pain over right side for 6 weeks duration which was progressively worsening. At the time of presentation, he was limping due to pain. The pain was

worse during morning and with physical activity too. He denied lumbar radiculopathy features. There were no other features of Spondyloarthropathy like- peripheral joint arthritis, enthesitis, uveitis, psoriatic skin or nail changes and inflammatory bowel disease. Neither did he have reactive arthritis features like urethritis, conjunctivitis or keratodermablennorhagica. He had loss of appetite over past two weeks and felt that he had lost some weight too. However he did not have fever.

There was severe tenderness over right sacroiliac joint with a positive Faber's test. His forward and right lateral lumbar spine flexion movements were restricted. Modified Schober's test was 3cm. There were no signs of peripheral arthritis, enthesitis, dactylitis, uveitis or psoriasis. Bath indices of disease activity were high- BASDAI Score was 6, ASDAS Score was 6.1 and BASFI Score was 6.2.

The basic investigation showed WBC of 11,300 with Neutrophils 68%, Haemoglobin 12.2g/dl and Platelet 414,000. Inflammatory markers were elevated with ESR 86mm and CRP 49mg/dl. The X-ray Lumbosacral spine was reported as having sclerosis of right sacroiliac joint.HLA B-27 was found to be negative.

As he had only axial disease we initiated Indomethacin 50mg thrice a day with Omeprazole 20mg twice a day and continued for 2 weeks and re-assessed him. There was no significant clinical or biochemical improvement as he had BASDAI score of 5.8, ASDAS score of 6, BASFI Score of 5.9. His ESR was still 82mm and CRP was 41mg/dl.

We changed over to another NSAID and treated with Naproxen 500mg twice a day and Omeprazole 20mg twice a day for 3 weeks and reviewed. Even at this point there was no significant clinical or biochemical improvement. His ESR had increased to 84mm and CRP to 44mg/dl. Since there was poor response of axial disease to two NSAIDS, before treating with biological agents like anti TNFdrugs, we requested for an MRI of lumbosacral spine and sacroiliac joints which revealed high signal intake of right sacroiliac joint with micro abscess formation. Sacroilitis was of infective origin.

The patient denied past or contact history of TB or having chronic cough with haemoptysis at the moment. However, upon further thorough questioning, he disclosed that he had been imprisoned for one year recently. We screened him for TB and found mild pleural effusion on the left side in chest X-ray, and marginally positive (10mm) mantoux test. Even though sputum AFB studies were negative, TB/PCR Gene Expert study was found positive. VDRL was nonreactive. HIV 1 and 2 antibodies were negative.

We liaised with the Chest Disease Clinic at this point and anti-TB treatment was started with a plan to continue for 9 months. When we reviewed him after 3 months of anti-TB treatment, he had good clinical and biochemical response with ESR of 36mm and CRP of 19mg/dl.

Conclusion

It is vital to be aware that Tuberculoussacroilitis can be often misdiagnosed as Ankylosing Spondylitis. Features like poor response to an optimum dose and duration of NSAIDS and high risk exposure for TB in the history should raise the suspicion.