Sacroiliac pain due to osteitis condensans ilii

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Learning Objectives

- Identify a differential for patients presenting with sacroiliac pain
- Recognize importance of careful evaluation of patients with SI pain

Introduction

- Pathogenesis is not well understood[1]
  - Mechanical stress in SI joints is proposed mechanism
- Prevalence estimated to be 0.9-2.5%[1]
- Waxing and waning pain in lower back, lateral hip or pelvic region[2-3]
- The differential for patients presenting with sacroiliac (SI) pain is broad[1]
  - Includes
    - Axial spondyloarthritis
    - Infectious sacroiliitis
    - Paget's disease
    - Degenerative arthritis

Patient Presentation

- 41-year-old female with chief complaint of right hip pain
- Pain was from her right buttocks and radiated down her thigh
  - Described as achy & throbbing
- Improved with ice and massaging but not with Tylenol or Ibuprofen
- Activity exacerbated the pain
- SI joint dysfunction was suspected
- At follow-up, patient stated pain remained with minimal to no improvement of symptoms
- OA or trochanteric bursitis was suspected
- Hip radiograph was ordered
- HLA-B27 was negative
- BMP, CBC unremarkable
- ESR was elevated to 35
- At follow-up, MSK exam remarkable for tenderness to palpation over the SI joint
  - Negative straight leg, FABER, and FADIR testing

	Osteitis Condensans ilii	Axial Spondyloarthritis	Infectious Sacroiliitis	Paget's Disease	Degenerative Arthritis
Epidemiology	F>M, age 20-40	M>>F, <45	m/c in patients with chronic diseases, immunosuppressed patients	Slight male predominance, >55	F>M , >60
Labs	often benign	+ HLA B27, elevated CRP	Leukocytosis	Elevated alkaline phosphatase	Benign, usually ESR <20
Radiographs	sclerosis of the iliac bone	erosions, sclerosis, ligament ossifications	nonspecific erosions	osteolytic, osteoblastic, and sclerotic changes	Joint space narrowing, osteophytes
Treatment	supportive	regular exercise, NSAIDs, PT	Antibiotics	bisphosphonates	Acetaminophen, supportive

Final Diagnosis

- **Radiology Report**:
  - no acute osseous abnormality or right hip arthropathy
  - Evidence of sclerosis on the iliac side of the right SI joint suggesting osteitis condensans ilii (OCI)

Imaging consistent with a diagnosis of OSI
→Identified by distinct radiographic findings

Management and Follow-Up

- Little evidence examining treatment options for OC[1-3]
- Management is focused on improving patient quality of life
- Our patient was initially treated with a topical anti-inflammatory and provided SI exercises
- Unfortunately, the pain persisted
- Prescribed Meloxicam which also did not relieve her symptoms
- Switched to Celecoxib 200 mg QD and referred to physical therapy

References

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