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Missed femoral neck fracture

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ABSTRACT: Femoral neck stress fractures are overuse injuries with devastating consequences if not diagnosed and treated appropriately.

This is a case report femoral neck stress fracture in a 79 - year-old female who was initially treated as osteoarthritis She later presented to us with right femur fracture and underwent total hip replacement. This case illustrates that causes other than osteoarthritis should be taken into consideration in patients presenting with anterior hip pain where symptoms are disproportionate to clinical and radiological findings. More advanced investigations such as MRI scan or regular follow up with plain radiographs should be performed. A delay in diagnosis can lead to secondary displacement of the femoral neck stress fracture . The main types of FNSF are compression-sided, tension-sided and displaced. The most common reported symptom is exercise-related groin pain. Radiographs form the first line of investigation, with MRI the second-line investigation.

I. INTRODUCTION

Anterior hip pain is a common complaint with many possible causes. Osteoarthritis, which is diagnosed radiographically, generally occurs in middle-aged and older adults. Arthritis in younger adults should prompt consideration of an inflammatory cause. A possible femoral neck stress fracture should be evaluated urgently to prevent the potentially significant complications associated with displacement

Stress fractures of the femoral neck are uncommon injuries. In general these injuries are seen in two distinct populations: (1) young, healthy, active individuals such as recreational runners, endurance athletes, or military recruits; and (2) the elderly who have osteoporosis. Stress fractures can be classified as either fatigue or insufficiency fractures or result from untoward cyclic loading or impaired bone quality. The key to treatment is early diagnosis, which may require scintigraphy or magnetic resonance imaging

Case report:

79 years old female presented to our clinic on 25/06/2020 Complaining of severe pain in her right hip and lower back, with some radiculopathy. No history of trauma, worse pain in groin/hip region Getting worse for the last 2-3 weeks .Weight bearing and walking slowly with support Wheelchair when going out .

On examination:

Reduced ROM globally, stiffness, axial loading painful .

Investigation :

Her x-ray showed advanced osteoarthritis of the right hip and SI joint degeneration



Patient Name: ALYAS,SALHA,SAHEM,
Patient ID: 080621
Study Date: 6/20/2020 11:21:57 AM
Study Description: X-RAY - PELVIS & BOTH HIPs
Accession Number: 1353997

No detectable displaced fractures.
Bilateral pelvic calcifications.
Sclerosed articular surface of both sacroiliac joints with still preserved Joint spaces.

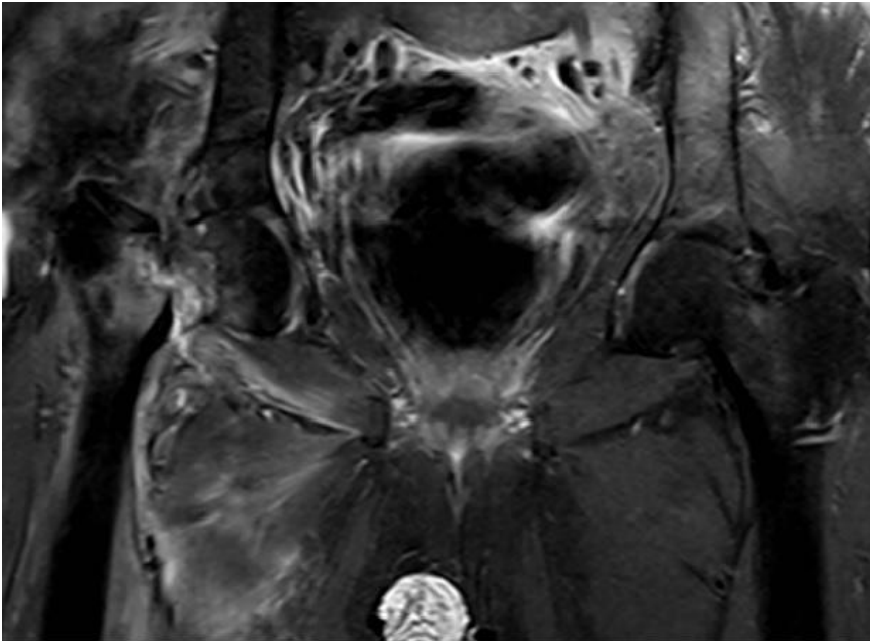
Treatment Plan :

- We discussed the treatment option for groin pain because of osteoarthritis which include analgesic, physical therapy, cortisone injection or more definitive option of total hip replacement.
- Pt. and family opted for cortisone injection as pain was getting severe and she was counseled for this.
- we booked the patient for right hip local anesthetic and cortisone injection under x-ray image on 30/06/2020
- - In OR Right hip local anesthetic and cortisone injection given under x-ray image

- Patient supine routine prep and drape 10 mL of 1% lidocaine injected superficially into the anterior aspect of the hip under x-ray image. spinal needle inserted, dye inserted and x-ray was taken to make sure we were in the joint, 10 mL of 80 mg Depo-Medrol and 0.25% Marcaine injected into the joint under x-ray image - uneventful
- Dressing applied

Follow up :

- Patient was seen in our clinic on 09-07-2020 with complaint of still persistent right hip pain, not resolved with injection, low back pain with radiation to right lower limb where we send the patient to do MRI Lumbar spine .
- On 13-07-2020 her pain started to increase in the last few days to a point she cannot bear weight on her right lower extremity with restriction of ROM
- MRI right hip was ordered and patient discovered to have fracture of intertrochanteric section of femur .



Post operation :

x-ray showing hemiarthroplasty in the right hip



II. CONCLUSION

The learning point with our case report is that all cases of anterior hip pain are not due to early onset osteoarthritis. Other differential diagnosis including stress fracture and avascular necrosis should be considered in patients with minimal radiological evidence of osteoarthritis. Our patient had severe hip pain out of proportion to the clinical and radiological findings. Hence that should have been further investigated with MRI scans or further radiographic follow up or referral to an orthopaedic clinic.

The most important factor however is regular follow up with regular radiographic review and awareness of this rare cause of anterior hip pain. Any delay in that process may lead to serious complications associated with secondary displacement of the fracture.



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