

Introduction :

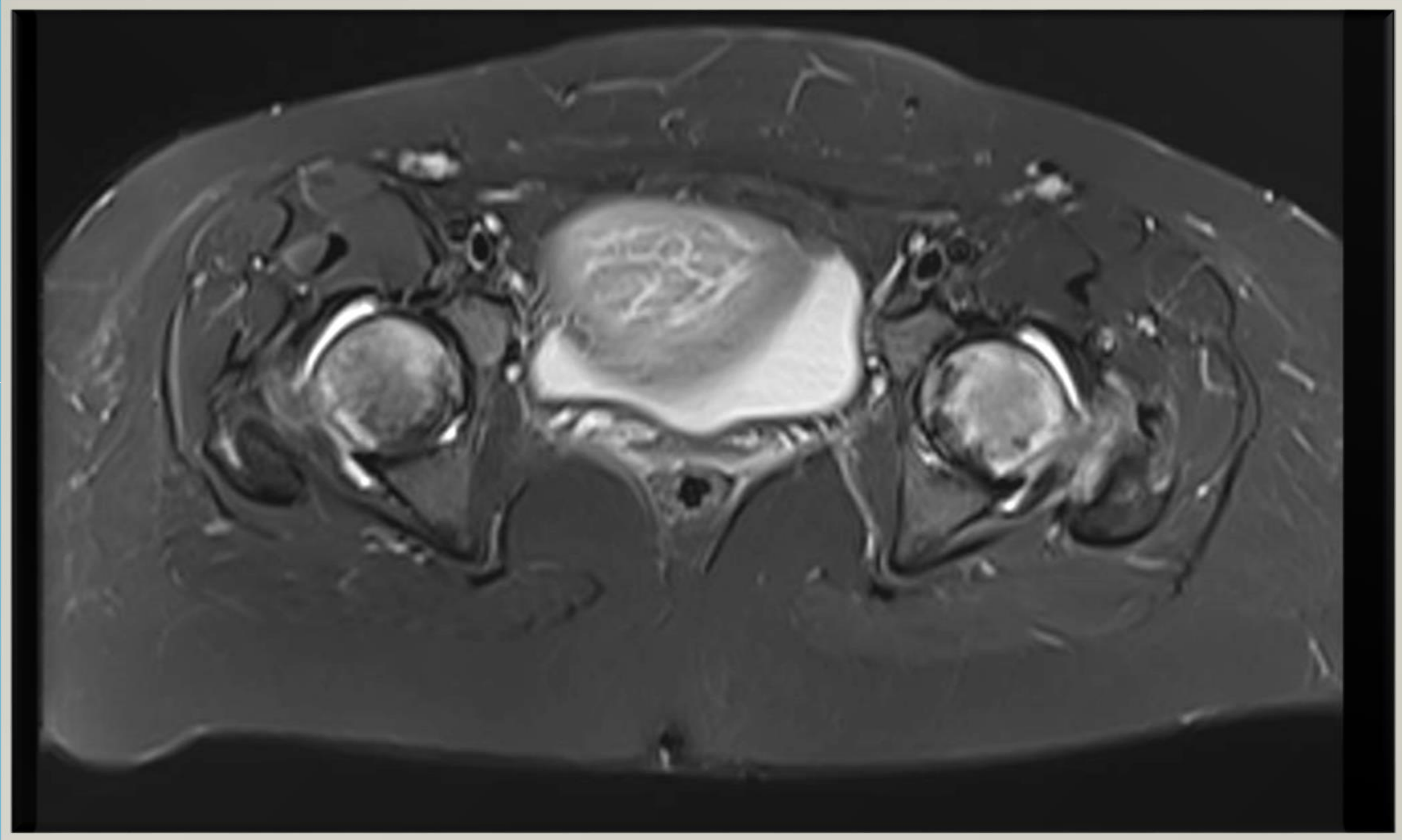
Transient osteoporosis of hip (TOH) in Pregnancy is a rare bone disorder related to bone marrow oedema syndromes. The incidence is quoted variably as 0.4 cases per 100,000 and 1 in 4900 pregnancies. It is difficult to accurately define the incidence due to rarity and reluctance to perform radiological investigations in pregnancy. It can present with pelvic pain, hip pain, lower back pain or fractured neck of femur in 2nd or 3rd trimester or post-partum. We present a post-partum patient with TOH, who came to the attention of the obstetric anaesthetists presenting with symptoms aligning with a complication of neuraxial anaesthesia.

Case Report :

A 25y primigravida in spontaneous labour had a labour epidural sited uneventfully, followed by a forceps delivery in theatre, via an epidural top up. Of note, she had a prolonged period in lithotomy (>2hours) in the labour room. She was discharged home the following day but returned 4 days later with shooting pain in left leg, lower back pain and difficulty in mobilising. On review, there was global power reduction in both lower limbs, left > right but no sensory deficit. The weakness prompted an urgent MRI that showed no compressive lesion. A neurology opinion was sought who considered it to be femoral neurapraxia due to lithotomy. Five days later, she re-presented with worsening and severe left hip/thigh pain with continued weakness of hip flexors, again with no sensory deficit. After MDT discussion, an MRI pelvis and hip was done which showed changes consistent with bone marrow oedema. Radiological diagnosis of TOH was made with resultant left hip flexor weakness due to severe pain. Rheumatology advised for a period of non-weight bearing, vitamin D supplementation and physiotherapy. She remained an inpatient for few days for analgesia and rehabilitation. She was followed up by telephone and she made a swift recovery.

Discussion :

Transient Osteoporosis of the Hip (TOH) is a rare, benign, self-limiting skeletal muscle disorder with a good prognosis.it is infrequently diagnosed and could be mistaken for complications from neuraxial blockade in the third trimester. TOH typically presents in the third trimester or postpartum as an acute, atraumatic onset of groin, anterior thigh, or buttock pain, affecting one or both hips. It can significantly impact maternal mobility, self-care, delivery decisions, and bonding with the newborn. Pelvic/hip pain affects up to 50% of pregnant women. The exact pathophysiology is unclear. Risk factors include advanced maternal age, low BMI, family history of osteoporosis, smoking, and IVF pregnancies, though many cases occur without any identifiable risk factor. Differential diagnoses include avascular necrosis (AVN) of the hip, septic arthritis, and malignancy. MRI is the investigation of choice, typically showing diffuse bone marrow oedema in the femoral head/neck with joint effusion. Management is supportive: strong analgesia, physiotherapy, and non-weight-bearing measures (e.g., crutches) to prevent fractures. Calcitonin, considered safe in pregnancy, may reduce symptom duration; bisphosphonates are avoided. Early consideration of TOH is important in pregnant women presenting with lower limb pain and weakness to prevent hip fractures. Further research is needed to understand its aetiology and guide prevention.



Bone marrow edema affecting bilateral proximal femur bilaterally

References:

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3. Shlomi Toussia-Cohen, Iris Eshed, Omri Segal *et al*. Transient osteoporosis of the hip in pregnancy – a case series, The Journal of Maternal-Fetal & Neonatal Medicine,2023; 36:1, 2175659