Transient Osteoporosis in Pregnancy – a Diagnostic and Management Challenge

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Background

Transient osteoporosis (TOP) of the hip is a rare presentation which disproportionately affects pregnant women in the third trimester. Given its seemingly benign presentation, there are often delays to diagnosis which can result in significant pain and debilitating loss of mobility.

Patient Case

A 40 year old woman presented to the emergency department at 35 weeks gestation with a six week history of progressive bilateral hip pain and severe decline in mobility. Initial investigations were unremarkable and a MRI demonstrated bilateral and extensive femoral bone marrow oedema suggestive of TOP.

She was managed conservatively and underwent an elective caesarean section at 37 weeks gestation, with gradual postpartum improvement of symptoms and independent mobility by four weeks postpartum.

Diagnostic Challenges

1. Unclear aetiology(1)
2. No identifiable risk factors
3. Clinician inclination in dismissing pelvic pain in pregnant women as musculoskeletal
4. Reluctance to perform imaging studies on pregnant women
5. Diagnosis of exclusion

Missed diagnoses can result in significant complications including fractures and avascular necrosis. (1)

MRI imaging is most sensitive at detecting changes of diffuse bone marrow oedema typically associated with TOP. (1,2)

Management

Delivery planning

- No clear guidelines available
- Caesarean section in majority of cases

Conservative management (3)

- For uncomplicated cases
- Non-weight bearing
- Analgesia

Medical management

- Limited safety data in antenatal and breastfeeding women (4)
- Bisphosphonates and calcitonin appear safe in limited observational data available

Resolution typically spontaneous within six weeks postpartum

References

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