

Pathological Fracture Neck Of Femur Secondary To Postpartum Osteopenia: A Case Report

Roshyn SK, Nasruddin AR, Azura L, Felix LYS

Department of Orthopaedic & Traumatology, Hospital Ampang, Selangor, Malaysia

INTRODUCTION:

A case of 34 years old Indian lady who presented with left hip pain for 2 months after a fall. At the time of fall she was 3 months postpartum and she was exclusively breastfeeding her child. On further history patient did not take any calcium, vitamin D supplement nor calcium rich food. On clinical examination, patient is well and no signs of malnutrition. The left hip is tender with limited range of movement due to pain. The X-ray of pelvis showed neck of left femur fracture.

MATERIALS & METHODS:

We did further investigation to rule out secondary causes of the fracture. Full blood counts, renal profile and liver profile showed a normal result. The inflammatory markers also not raised. The Tumour marker such as Apha fetoprotein, CA 125, CA 19.9, and CEA were also normal. Serum calcium level was normal but slight raised of serum inorganic phosphate (1.58). The thyroid function also raised (FT4 29.82, TSH 0.341) and parathyroid hormone level reduced (1.36)

Skeletal survey done and showed no abnormality. We proceed with CT scan of left hip and the result showed non union neck of femur fracture with subluxation of femoral head with no avascular necrosis (AVN) changes

RESULTS:

We did open reduction, screw fixation with fibula bone strut graft on 21/11/16. Bone for histopathology also take from the fracture site and result showed no malignancy cell seen.

Patient was started on Alendronate acid, calcium and calcitriol post operative and was given regular follow up at Orthopedic clinic.

On latest follow up, Patients pain reducing and the bone shows good recovery. She was allowed for partial weight bearing of left lower limb.



CONCLUSION

Transient osteoporosis during pregnancy is a rare, self-limiting disease; however the outcome can worsen if pt has got some underlying disease. The increased metabolic state and calcium demands during pregnancy and lactation results in some expected loss of bone mineral density, but with recognized individual variance. In our patient there was also an underlying pathology, which is hyperthyroidism. Hyperthyroidism is associated with accelerated bone remodeling, reduced bone density and resulting osteoporosis. We did an open reduction and screw fixation with fibula bone strut and the outcome was good with excellent recovery rate. For patients with metabolic diseases and/or the patients in pregnancy and postpartum period, preventive measures should be increased to reduce the risk of pathological fracture.

REFERENCES:

1. Non-traumatic, bilateral subcapital femoral fractures postpartum Anhar Yasin, Issrah Jawad, Ross Coomber
2. Direct Stimulation of bone resorption by thyroid hormones Mundy GR, Shapiro JL, et al