

Non-Prosthetic Peri-Implant Fracture of Midshaft Femur of a Patient with Antiphospholipid Syndrome

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INTRODUCTION:

A non-prosthetic peri-implant fractures (NPPIFs) is challenging to manage due to anatomy distortion along with osteopenia of the affected bone. Presence of autoimmune disease increase the rate of osteopenia and osteoporosis of the bone thus increasing rate of fracture among the affected patients.

REPORT:

A 43 year-old lady, known case of anti-phospholipid syndrome (APLS) presented with trivial fall on flat surface of floor in which she fell directly onto her left thigh. Post fall she had pain and deformity of the left thigh. Neurovascular status of her left lower limb was unremarkable.

The patient previously had history of road traffic accident in 2006 that was treated at other center. She sustained open fracture of the midshaft femur and closed fracture of proximal tibia of the same limb. Patient was treated with plating of femur and proximal tibia and by history from the patient, she sustained infection post-operatively and surgical debridement and re-plating done. Pre-morbidly, she was able to ambulate without aid. There was no history of pain during ambulation around the previous fixation site.

Intraoperatively, the fracture united and the bone was osteopenia resulting in iatrogenic fracture at the fracture site during rimming of the canal. The check x-ray post-operative was good, and patient was discharged well with advice of non-weight bearing ambulation.

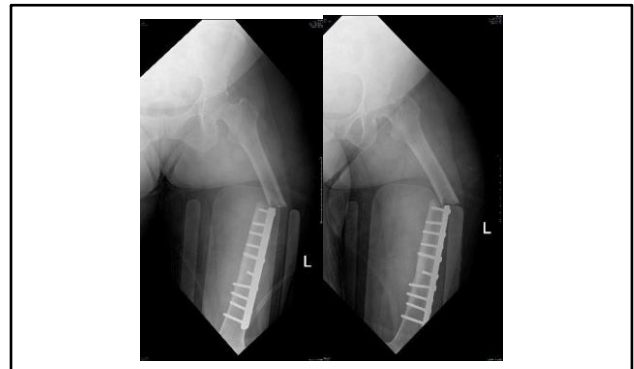


Figure 1: Pre-operative x-rays



Figure 2: Post-operative x-rays

CONCLUSION:

Bone ischemia is the most probable cause secondary to formation of microthrombi in vasculature of the bone and osteoporosis of the bone. The previous fixation also leads to rigidity of the assembly due to stress riser effect at the tip of the plate.

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