

Bilateral Hip Fracture in Hemodialysis Patient: A Case Report

Yusof, Nuruddin; Sasidaran R; Afiq A;

Tuanku Ja'afar Seremban Hospital

INTRODUCTION:

Concurrent bilateral femoral neck fracture is a rare entity. The incidence of hip fracture in patients undergoing haemodialysis is significantly higher than that in the general population. However, simultaneous bilateral femoral neck fractures in patients on dialysis are extremely uncommon

REPORT:

A 86-year-old lady presented following a simple fall while walking on slippery floor. Post trauma, she was unable to stand. Premorbidly, she was home ambulator, independent woman with ESRF, hypertension and dyslipidemia. She is on hemodialysis nearby healthcare facility. Clinical examination revealed both lower limb externally rotated and pain on movements. Radiographs were taken which revealed bilateral intracapsular fracture neck femur (Pauwel I:left side, Pauwel II:right side). Therefore a bilateral bipolar hemiarthroplasty was planned.

Her renal profile was deranged but not worsening than baseline, Calcium level is normal 2.19 (N: 2.18-2.6), phosphate is high 1.81 (N:0.78-1.65). Otherwise, TSH and PTH were normal. Posterior approach with alternate left and right lateral position was employed. Following surgery, patient was mobilizes with walker. She had an uneventful wound healing and was ambulating independently without any aid by 6th week post-surgery.

DISCUSSION:

With the availability of hemodialysis service, patients with ESRF live longer and the incidence of bone disease increases. Failure in glomerulus in osteodystrophy patient results in phosphate retention. Reduction in tubular filtration and increased serum phosphate causing decrease in vit D synthesis. These changes results in profound reduction in serum calcium, which later causing bone resorption.



Our patient was diagnosed with ESRF, on hemodialysis for the past 6 years. Bilateral neck of femur fracture caused by osteopenia due to chronic renal failure. Neck of femur acts as the lever arm that brings all the acting muscle and weight bearing forces. Deterioration of bone quality susceptible to fracture to this zone.

CONCLUSION:

Hip fracture in hemodialysis patients poses serious challenges for surgeons. Multidisciplinary team for perioperative management is necessary. Early diagnosis with prompt surgical treatment lead to favorable recovery.

REFERENCES:

1. Sood A., Rao C., Holloway I. Bilateral femoral neck fractures in an adult male following minimal trauma after a simple mechanical fall: a case report. Cases J. 2009;2(1):92.