

Neglected Neck of Femur Fracture with Ipsilateral Shaft Femur Fracture Treated with Total Hip Arthroplasty and Screw-Cable Plate

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INTRODUCTION:

An ipsilateral femoral neck and shaft fracture are rare and decision making for the management often is difficult.¹ Fixation for both fractures should be done early especially for the neck of femur due to risk of avascular necrosis.² For patient with established avascular necrosis, decision always toward the replacement of the head with total hip arthroplasty.

REPORT:

Mr. AM, 70yo Malay gentleman with known case of diabetes mellitus, hypertension and had history of right neck of femur fracture in 2012, no surgery was done and patient ambulated using walking stick. Alleged hit by goat from behind and sustained closed fracture midshaft right femur.

Decision of management consists of right total hip arthroplasty with long femoral stem or right total hip arthroplasty with cable plate. In view of the shaft fracture is beyond the availability of longer stem to have sufficient length to extend 2 to 3 cortical diameters distal to the fracture to be considered effective fixation, decided for THA with cable plate.³ Although some study showed screw plate systems may offer more stability than cable plate systems, it can create stress risers in local bone leading to refracture. The increased strength afforded by unicortical screw in screw plate systems also have a risk of prosthesis loosening due to violation of the cement mantle.⁴ Cable plate systems only problem is it have higher torsional load-to-failure of fixation. Study done by Dennis and co workers found that a construct with proximal unicortical screws and distal bicortical screws was the stiffest and being surpassed only by a construct that proximally combined both screws and cables.⁵

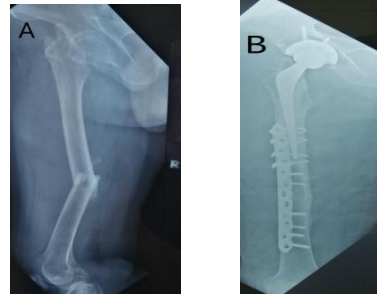


FIGURE A:
Pre operative

FIGURE B:
Post operative Xray

Figure A showed neck of femur fracture with ipsilateral shaft femur fracture and Figure B showed total hip arthroplasty with combination screw-cable plate systems.

CONCLUSION:

Total hip arthroplasty with combination of both screws and cables in construct of proximal plate fixation always have better outcome in term of axial compression, bending and rotational stability.

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