

FIXING NECK OF FEMUR FRACTURE IN PATIENT WITH TOTAL KNEE REPLACEMENT AND DISTAL FEMORAL LOCKING PLATE

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Introduction: Femoral neck fractures are a rising problem in our aging society which associated with high morbidity and mortality. The association of proximal and distal fractures in the ipsilateral femur hinders the surgical management. A 70-year-old lady who is independent of daily activity with history of right total knee replacement done 5 years ago for primary knee osteoarthritis. She was well until she had a fall while putting on her shoes and landed onto the right side of body sustaining right neck of femur fracture. Subsequently she underwent cemented bipolar hemiarthroplasty. Proximal 2 screws from distal femoral locking plate were removed in order to place a longer stem. She was well postoperatively and started ambulating with walking frame.

Discussion: The management of periprosthetic fractures is often demanding, complex, and expensive. The peculiarity of this case is the presence of distal femur locking plate with total knee replacement in the ipsilateral limb which makes the surgery challenging. The objective of surgical intervention is to achieve stable fixation in order to prevent recurrent fracture which involves decision of cemented or uncemented hemiarthroplasty. Cemented bipolar hemiarthroplasty was performed in index patient to ensure solid bone-implant interface allowing femoral stem firmly fixed within the femur. Technical preparation for cemented implants does not require extensive reaming and broaching of the canal. In addition shorter operative time is needed and it create a smooth transmission of stress to the distal femur. Beals and Towels concluded periprosthetic fractures around cementless femoral stems occur only 0.5 years after insertion, compared with 6.6 years for cemented implants. Another decision in the case was the length of femoral stem. In order to minimize stress riser, longer femoral steam was used and by passed the distal femoral locking plate.

Conclusion: Proper preoperative planning and operative technique are prime important in dealing with periprosthetic fracture.