Medical Science



Original Research Paper

long stem bipolar in segmental fractures femur

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ABSTRACT

Proximal femoral fractures require early operative stabilization to enable early mobilization especially in the elderly. This is to prevent the development of the complications, which result from prolonged immobilization, such as Orthostatic pneumonia, urinary tract infection, pressure sores and venous thromboembolism. Various methods can be used for stabilization of these fractures, like the dynamic hip screw, the angled blade plate or the intramedullary nail with proximal lag screw (trochanteric Gamma nail, proximal femoral nail or reconstruction nail). However, in certain proximal femoral fractures such as subtrochanteric fractures

with associated femoral neck fractures, periprosthetic fractures and pathological fractures, the use of standard methods of fixation may not be feasible. In such cases, the use of long femoral stem component provides adequate and immediate stabilization of the fracture. We report a case where we employed the use of long femoral stems to treat such fractures.

The patient is 76 yr old female with malunited trochanter on oneside and other side has got neglected # neck of femur with proximal # shaft of femur with roational displacement. We at Dept of orthopaedics, Tirunelveli medical college hospital did longstem bipolar hemiarthroplasty and mobilized the patient from 3 P.OD

KEYWORDS:

Introduction

Long stem cemented hip arthroplasty, whether total or hemi, is fast becoming an established form of treatment in cases of proximal femoral fractures in the elderly. Internal fixation in these cases can lead to a higher incidence of fracture non-union and implant failure, especially when dealing with pathological bone, in cases of osteoporosis and metastasis.

Case details:

76 Year old female H/O Fall few yrs back rt side treated by a native bonesetter, walked with limping gait fell down again neglected for 4 months X Ray showed nonunion # Neck of femur,# proximal shaft of femur (lt).we did cemented bipolar long stem hemiarthroplasty by posterior Moore's approach.patient mobilsed from 3 P.O.D.

Discussion

In the treatment of any proximal femoral fractures, whether pathological due to tumor deposits or osteoporosis, there are two issues which need to be addressed:

Adequate stability for immediate weight bearing and

The prosthesis should bypass the abnormal bone to obtain a stable and strong construct.

From a biomechanical standpoint, the tip of the intramedullary femoral stem should bypass the most distal area of weakness by two bone diameters. This minimizes stresses and motion that could be associated with clinical loosening of the cemented stem. [2,2]. A shorter stem that just bridges the fracture may not provide adequate distal fixation due to high cement-bone shear stresses $[\gamma_{13}]$. In our case it is a case of nonunion fracture neck of femur (It) with AVN Changes which itself demands a replacement surgery added to it # proximal femur with rotation .patient being older needs early mobilization so we opted for replacement surgery as we can address two fractures. The other alternative will be hemiarthroplasty along with ORIF for # femur with Locking compression plate. This option needs bony union at # shaft of femur which maynot happen due to ageing and other comorbid conditions.Added to it bony union takes longer time which not preferable in elderly individuals.we are reporting this case for its

rare occurance of fracture pattern ,delayed presentation and possibility of getting good results .



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