

Non Vascularized Fibula Graft for Screw Cut Out of FNS in Fracture Neck of Femur: A Case Report

¹Ashraf CMN; ²Faisham WI; ¹Sahran Y; ²Syurahbil H

¹Department Orthopedic, Universiti Sains Malaysia, Kubang Kerian, Malaysia.

INTRODUCTION:

Non-union is a challenging complication following a femoral neck fracture. Femoral neck fracture in young adult usually treated with osteosynthesis such as cannulated screw fixation, DHS as well as Femoral Neck System (FNS). One of the complications is screw cut out due to high shearing forces. We reported 1 case of screw cut out following FNS neck of femur fracture treated with non-vascularized fibula graft.

REPORT:

42 years old man had history of alleged motor vehicle accident and was diagnosed to had closed fracture neck of left femur and shaft of femur. Patient was treated with femoral neck system and retrograde nailing. Postoperative Xray review, the screw used was short with TAD 40mm. During follow up, Xray showed screw cut out. Patient underwent another operation for removal of FNS and non-vascularized fibula graft neck of femur.



Figure 1: Xray showed screw cut out.

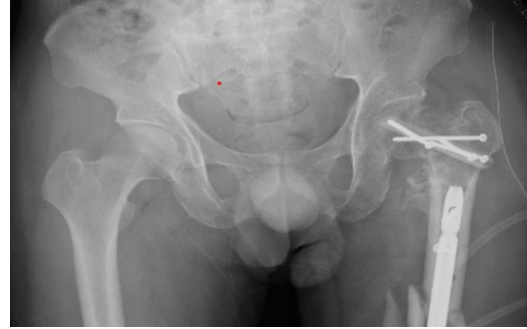


Figure 2: Xray post vascularized fibula graft

CONCLUSION:

The treatment of femoral neck non-union in a young patient is still a head preserving procedure. Neck shortening in non-union reflects the severity of femoral neck resorption, and it is due to delayed diagnosis and intervention. Free non vascularized/vascularized fibula graft (FVFG) has shown to be an effective method to solve non-union of the femoral neck in young patients, even in the presence of avascular necrosis.

REFERENCES:

1. Faisham WI, Munajat I, Salim AA. Femoral Neck Non-union Treated using Compression Screw with or without Gluteus Medius Trochanteric Flap: A Case Series of Ten patients. Malays Orthop J. 2021 Nov;15(3):137-142.