Successful Extraction Of Broken Cemented Stem Of Unipolar Hemiarthroplasty Using Lateral Bone Window And Conversion To Total Hip Replacement

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INTRODUCTION:

Fractured femoral stem is incidence was documented between 0.23 to 11% in the literature. We are reporting a case of successful femoral stem extraction using lateral bone window.

REPORT:

A 64 year old lady with history of left unipolar hemiarthroplasty done in 2019 presented with left gluteal pain that was worsening over 3 month course. Pain exacerbated with ambulation and relieved by resting. On examination there was Tredelenburg gait and tenderness over proximal left femur. Xray showed broken left femoral stem without associated bony fracture. She was scheduled for implant removal. Using lateral approach to the hip on lateral decubitus, Femoral shaft area near to tip of femoral stem identified and rectangular bone window made to aid in extraction of implant and cement mantle. Two cerclage wire was applied post removal to prevent fracture propagation and to enhance union.



Figure 1: Pre-operative Radiograph



Figure 2: Post operative radiograph

Fractured femoral stem prosthesis incidence is documented between 0.23 to 11% in the literature. The highest concentration of stress occur over the lateral aspect of middle third of femoral stem that could initiate a fractured stem. In the past, multiple factors was identified ranging from patients factor such as age, weight, implant position and even the implant itself. Removing the distal part of the broken stem is challenging procedure. Many technique was proposed in the past such as trochanteric osteotomy, push distal part via knee arthrotomy or drilling proximal part of retained stem and proximal femoral window.

CONCLUSION:

Broken femoral stem extraction using lateral window has shown to be effective with minimal risk of morbidity such as lower risk of iatrogenic fracture and cement extravasation.

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