Young Femoral Neck Fracture: 3 Years Tertiary Hospital Experience

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INTRODUCTION:

Femoral neck fracture in patients 60 years old or younger are challenging injuries to treat. It was a high-energy injury that are associated with major fracture healing complications such as avascular necrosis, nonunion, and significant shortening. Internal fixation is performed for to preserve the native hip joint. The aim of this study was to evaluate the functional outcome and complications.

METHODS:

A retrospective study was conducted on patients 60-year-old and below with femoral neck fracture operated on between year 2014 and 2016 in Serdang Hospital. Data regarding age, type of fixation, injury-to-surgery time, duration of hospital stay, healing time, ability to return to work and complication due to the surgery were analyzed. Radiographic examinations were taken to assess the adequacy of reduction, implant fixation and degree of bony union. The functional outcome was evaluated using Oxford hip score.

RESULTS:

A total of 16 patients 60-year-old and below with femoral neck fracture operated on. The mean age was 38 years (range, 19-58 years). 15 (94%) patients were treated with screw fixation and 1(6%) with dynamic hip screw. The mean injury-to-surgery time was 10.73 hours and mean length of hospital stay was 7 days. The mean healing time was 17.33 weeks. There were 2 (13%) patients complicated with infection, 3 (19%) patients with avascular necrosis, 4 (25%) patient with non-union and 3 (19%) patient with implant failure. 10 (63%) patients able to full weight bearing with mean of 18 weeks. 6 (37%) patients not able to return to work. The mean Oxford hip score was 38.2.

DISCUSSIONS:

Prompt surgical treatment was needed to prevent complication from the fracture. Most of our patient was treated early with screw fixation with mean of 10.73 hours post injury. There were patients complicated with avascular necrosis and non-union which is the common complications. The functional outcome post fixation was satisfactory.

CONCLUSION:

Young femoral neck fractures were best treated with early screw fixation to achieve adequate and anatomical reduction. Hence, it reduced complication post operatively.

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