Fracture Neck Of Femur - A Local Experience

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INTRODUCTION:
Hip fractures is one of the commonest in elderly patients with various co-morbidities. The incidence of hip fracture in Malaysia is about 90/100 000 population and commoner in women.1 Mortality rate within six months after femoral neck fracture is reported at about 11-23% and 22-29% at one-year worldwide.2. Therefore, we evaluate all the neck of femur fracture patients who were admitted for surgery to create a greater understanding of peri-operative risk and possible correlation to post-operative prognosis.

METHODS:
All patients were admitted to Sarawak General Hospital over a year and underwent surgical procedure for fracture neck of femur. Decision for total or hemiarthroplasty was made following Rogmark et al. criteria.3 Demographics and peri-operative investigations were recorded from hospital medical records. Statistical data was analyzed using IBM SPSS Statistics Software.

RESULTS:
A total of 45 patients with neck of femur fracture were evaluated. Majority of patients are elderly with mean age of 72.91. More patients are female (66.67%) with slightly more left sided fracture (53.3%). More than 15% and 30% of patients has more than 3 co-morbidities and 2 co-morbidities respectively. Mean time of surgery is 18.86 days post trauma. Total of 46.7% of patients underwent total hip replacement.

Peri-operative investigations noted that mean haemoglobin level was 11.6 g/dL with 20% below 10 g/dL. Mean sodium, potassium, urea and creatinine level was 134.9, 3.83, 6.5 mmol/L and 110.1 µmol/L. Post-operative noted that 75.6% of patients was ambulatory and mortality at three months was 4.4% and 11.1% at six months. Results showed that there was no correlation between gender and survival (p=0.50) and no increase in mortality if peri-operative Hb is less than 10g/dL (p=1.0) or higher number of co-morbidities (p=0.703). There was also no significant increase in mobility (p=0.13) or mortality (p=0.75) for patients who underwent total hip replacement.

DISCUSSIONS:
Even though numerous studies had demonstrated links between co-morbidity and male gender with mortality, our data shown no significant relation.4 However, the mean age and female gender preference of patients were similar to trends over the past decades.2 Peri-operative Hb in our patients was not directly related to mortality as opposed to study by Maxwell et. Al.3 Our patient’s mortality of 11% (six months) stands at the lower range of norm (11-23%)2 It was also noted that 33% of patients admitted had Na of less than 135mmol/L and 25% had Hb level below 10g/dL with 37.8% of patients had deranged creatinine level.

CONCLUSION:
Evaluation of our local patients with femoral neck fracture had noted that significant patients have multiple co-morbidity, deranged electrolytes and renal profile with low Hb. Approximately, more than 10% of mortality at six months with no correlation to gender, Hb level and number of co-morbidity. In conclusion, multidisciplinary approach is required for medical assessment and optimization with correction of deranged parameters to ensure optimal patient’s condition and timing for surgical intervention.