Osteoporotic Hip Fractures in Singapore—Costs and Patient’s Outcome
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Abstract

Introduction: Little data are available on costs and outcome associated with osteoporotic hip fractures in Singapore. Materials and Methods: A retrospective study was carried out on 280 consecutive hip fractures in patients older than 60 years admitted over a 3-year period. Results: The mean age of patients was 80 years. Sixty-eight per cent were female and 58% were intertrochanteric fractures. Two hundred and sixty-four patients (95%) were operated upon. The mean total hospitalisation period was 17 days. Seventy-six per cent were staying in their own homes prior to the hip fracture while 22% were admitted from nursing homes. After surgery, 63% of patients returned to their homes while 26% needed nursing home care. The index admission mortality rate was 5.7%. Mortality was 26% at 1 year. Of those alive at 1 year, ambulatory status was: 28% were walking without aids, 39% were walking with aids, 24% were wheelchair bound and 9% were bedridden. Poor ambulatory function at discharge was related to increased mortality at 1 year. The average cost incurred was S$7367. The average government subsidy amounted to 82%. Ninety-one per cent of patients were warded in subsidised beds. Breakdown of cost was as follows: hospital stay, 42.6%; surgery, 36.5%; ward treatment, fee 9%; laboratory and X-ray investigations, 4.4%; implant costs, 3.5%; drugs, 1.6% and rehabilitation, 1.1%. Multivariate analysis showed that the cost is significantly related to days spent awaiting surgery, preoperative sepsis, operative complications and cerebrovascular accidents. Young age, good American Society of Anesthetists (ASA) status and endoprosthesis replacement were factors that allowed for early ambulation and lower costs. Conclusion: The mortality rates and functional outcome are not very different from published studies in the West. More of our patients returned to their own homes after hospitalisation. Early surgery, close involvement of the medical social worker and intensive physiotherapy or provision of outpatient therapy facilities may help cut cost of treatment.

Key words: Ambulation, Function, Mortality, Morbidity, Osteoporosis

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