DEMENTIA AND HEMIARTHROPLASTY

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INTRODUCTION:

Hip fracture is a serious and frequent injury in elderly patients. It is associated with increased morbidity and mortality. The prevalence of dementia is significantly increasing owing to aging of the global population.

REPORT:

We report a case of a 65-year-old lady with dementia, who sustained a closed fracture neck of left femur due to a fall 3 weeks prior. Premorbid, her function was severely limited, and ADLs were assisted by her caregiver.

A mini mental state examination (MMSE) resulted in a low score of 2. Decision was made for unipolar hemiarthroplasty after family discussion.



Figure 1: Pre- and post-operative pelvic X-rays.

We approached via anterolateral, femoral head delivered (40mm), we opted 42mm standard stem Thompson Hemiendoprosthesis. Post reduction, the hip was stable. Closure was done in layers.

Post operatively, drain was removed on day 2 and walking frame ambulation initiated. She was discharged to geriatrics for rehabilitation.

However, her condition deteriorated, went into delirium leading to multiple episodes of dislocation which was reduced via surgery.

Eventually developed a prosthetic joint infection, requiring resection arthroplasty.



Figure 2: Pre- and post- open reduction.

CONCLUSION:

There were numerous factors attributing to the dislocation. The most significant was dementia. Her lack of understanding, difficulties in communication and inability to follow post-op precautions lead to the multiple dislocations. In addition, difficulty in maintaining her posture puts her leg at risk of dislocation. Although surgery remains the mainstay in treatment of displaced femoral neck fractures in the elderly, in patients with dementia and low MMSE, we should consider conservative approach.

REFERENCES:

- 1.Lai YC, Tang PL, Kuo TJ, Hsu CJ. Different impacts of dementia on two-year mortality after osteosynthesis and hemiarthroplasty in treating geriatric hip fractures. Arch Gerontol Geriatr. 2018;79:116-22.
- 2.Hou M, Zhang Y, Chen AC, Liu T, Yang H, Zhu X, et al. The effects of dementia on the prognosis and mortality of hip fracture surgery: a systematic review and meta-analysis. Aging Clin Exp Res. 2021;33(12):3161-72.