

Femoral Neck Fracture in Parkinson's Disease: Replace or Not to Replace?

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INTRODUCTION:

Bipolar hemiarthroplasty is a surgical treatment for elderly with displaced femoral neck fractures. The procedure is challenging in patients with Parkinson's disease (PD) due to associated motor dysfunction and increased risk of perioperative complications. This case-report discusses the management of a Parkinson patient with femoral neck fracture who underwent bipolar hemiarthroplasty which eventually required conversion to girdlestone procedure.

REPORT:

A 60-year-old lady with PD presented with history of low energy fall at home preceded by generalised body weakness. Post-fall, she sustained left hip pain and was unable to ambulate. Premorbidly she was a home ambulator requiring walking stick and assistance in activities of daily living. Upon review, there were swelling, bruises and tenderness over her left hip, with generalised hypertonia and rigidity over all limbs. Pelvis and hip radiographs showed left transcervical neck of femur fracture. CT brain revealed multifocal multiages infarcts. Despite Sembo score of 17, left bipolar hemiarthroplasty was performed in consideration of the severity of her PD. Hip was reported stable intraoperatively despite tense soft-tissue causing difficult hip reduction. She was well postoperatively but was unable to ambulate and can only transfer to wheelchair with aid. She was readmitted 1 month later due to dislocated bipolar prosthesis. She denied any trauma or fall. Decision for girdlestone procedure was made as high risk of further dislocation was anticipated in view of her severe PD symptoms. Her functional status remained the same post Girdlestone procedure in comparison to post bipolar hemiarthroplasty.



Figure1: Radiographs pre and post Bipolar procedure



Figure2: Radiographs pre and post Girdlestone procedure

CONCLUSION:

Bipolar hemiarthroplasty is challenging in Parkinson's patients with femoral neck fractures, especially with increased risk of post procedure dislocation. Conservative management should be considered as a treatment option. However, if surgical intervention is deemed necessary after consideration of patient's functional status and perioperative risks, then careful planning and execution are crucial to minimize perioperative complications. Further research is needed to decide the optimal management approach for this population.

REFERENCES:

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