

MODULAR DUAL MOBILITY DISLOCATION POST REVISION OF FAILED PROXIMAL FEMORAL NAIL FOR COMMUNATED INTERTROCHANTER FRACTURE

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Introduction: Modular Dual Mobility cup(MDM) arthroplasty surgery has been existing since 1970. Dislocations from this surgery are rare but still possible. Indications for such prosthesis are for stiff spine and revision surgeries to reduce the risk of dislocations and allow better range of movement compared to constrained liner. The author would like to share a case of dislocated Modular Dual Mobility polyethylene liner, following a non-union greater trochanter.

Discussion: This is a case of a 72 years old female alleged fall and sustained comminuted left intertrochanteric femur fracture. She underwent left proximal femoral nail complicated with nail blade being cut through the femoral head due to osteoporotic bone. In view of stiff spine, we had planned for MDM arthroplasty with greater trochanter fixation. However, due to non- union of the greater trochanter, polyethylene liner was dislocated 3 months later. She underwent revision surgery using constrained liner with greater trochanter fixation and bone graft. Rate of intra prosthetic dislocation following MDM is 1-2%. Greater Trochanter non- union rates is 5-17% and it's commonly associated with abductor insufficiency which could contribute to dislocation in hip arthroplasty. Greater trochanter avulsion fracture can be addressed by tension band wiring or trochanteric grip plate with or without bone graft. Constrained liner is other alternative to prevent dislocation however it has its limitations to range of movement and wear rate.

Conclusion: There is risk of dislocation in MDM for patients with greater trochanter avulsion fracture with underlying stiff spine. Hence, using a constrained liner can be considered in such cases. A randomized controlled trial with large sample size is required to further conclude this.