

REVISION TOTAL HIP ARTHROPLASTY WITH PROXIMAL BONE LOSS USING WAGNER FEMORAL STEM, PLATE AND CABLE FIXATION

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Introduction: Proximal femur bone loss after THA poses major challenges during its revision. Osteolysis due to loosening, wear and pre-existing osteoporosis are common causes. Reconstructive options depend upon quality and quantity of remaining bone.

Discussion: A 69-year-old lady with history of bilateral TKA, underwent left THA due to neglected neck of femur fracture. She sustained periprosthetic fracture after index surgery with subsidence complicated with lateral cortex cut-out adjacent to the femoral stem. Revision of the left THA was done using a Wagner cementless, tapered femoral stem, the greater trochanter was reattached with cable fixation to a femoral plate which was bridged across femoral stems of both THA and TKA.

Conclusion: Uncemented implants have lower rates of loosening than cemented implants, and it provides initial mechanical stability with press fit distal fixation. Secondary biologic stability occurs with bony osteointegration from diaphysis onto implant. The Wagner femoral stem is conically tapered with longitudinal ridges for distal fixation to diaphysis with axial and rotational stability, rough blasted surface supports bone ingrowth, furrows between ridges for revascularization and reactive ossification in the intramedullary space. Cable fixation of greater trochanter with attached hip abductors onto the revised hip improves function. Stress riser from the proximity of THA and TKA femoral stems predisposes to future interprosthetic fractures. A single femoral stem reduces femoral strength by 32% and fracture risks doubles with an ipsilateral retrograde stem. Risk is mitigated by bridging the interprosthetic space using femoral plate with tension cable fixation.