

Reconstruction of Acetabulum Bone Defect in Revision Total Hip Arthroplasty

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INTRODUCTION:

Revision total hip arthroplasty in acetabular bone loss is a challenging procedure in achieving primary stability and durable fixation.¹ These include bone grafting with mesh, structural cups, allografts, metal augments and many more.

REPORT:

A 29 years old lady came with 1 year history of painful left hip following fall. Patient had traumatic neck of femur fracture with hip dislocation ten years prior, and underwent screw fixation. Due to implant failure, bipolar hemiarthroplasty was done the following year.

Clinically, there is a limb length discrepancy of 3cm with limited hip range of movement.

Xrays and CT scan showed proximal migration of the implant with significant bone defect at acetabular wall.

Revision of total hip arthroplasty was done using a metal augment as intraoperatively, there is bone defect at superior and anterior aspect of acetabular wall. Digastric trochanter osteotomy was performed to aid with the removal of implant.

CONCLUSION:

Acetabular wall defects are a major concern to manage in total hip arthroplasty as many aspects need to take into account including patient selections, appropriate preoperative evaluation and implant selection to achieve a good outcome. Depends on the severity of bone defect, multiple reconstruction options are available and each technique has its advantages and disadvantages. Metal augment was selected, as it provides structural stability and may enhance bone ingrowth as compared to allograft which may dissolve faster.



Figure 1: Pre and post operative xrays



Figure 2: Intraoperative findings

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