Augmentation For Acetabular Deficiencies In Complex Total Hip Arthroplasty.
The Seremban Experience

Radzuan RF, Shamsuddin AF, Ahmad AR, Solayar GN
Hospital Tuanku Ja'afar Seremban (HTJS), Negeri Sembilan
International Medical University (IMU), Seremban, Negeri Sembilan

INTRODUCTION:
Complex and Revision Total Hip Arthroplasty (THA) is a challenging prospect in patients with acetabular bone deficiencies. Augmentation using allograft and trabecular metal (TM) are among some of the options in these situations. The objective of this study is to report outcomes of 11 cases of complex and revision THA using acetabular augments performed in HTJS between 2015 and 2017.

MATERIALS AND METHODS:
In this retrospective study, data included demographic features, indication for THA, type of augments and clinical outcomes using the Harris hip score. All patients were follow up for an average duration of 8.9 months.

RESULTS:
Eleven THAs were performed using acetabular augments within the study period. The average duration of follow-up was 8.9 months. The mean age was 59.3 years. Gender distribution was equal with five male and female patients each. 7 THAs were augmented with allograft and 4 cases with TM cups. The mean post-operative Harris hip score for functionality was 80.84% in our cohort.

DISCUSSIONS:
Complex/revision THA using allografts for acetabular augmentation have been used for decades with good and replicable results as shown in our series. TM is relatively new but current literatures show encouraging results.

TM acetabular components in type 3A and 3B have proved a success rate of 98% with good functional outcome[1]. Both options have resulted in good outcomes in our cohort and further long term studies would be necessary before TM augments were to replace the need for allograft.

CONCLUSIONS:
There is still no consensus regarding the best option for acetabular reconstruction in the setting of revision and complex THA with significant acetabular bone defects. However, revision using both allografts and TM acetabular augments have both showed a good results post-operatively in our cohort.

REFERENCES:

Fig 1: Acetabular TM augment in revision THA surgery using a constrained cup