

ARTHROSCOPIC TREATMENT FOR POSTERIOR SHOULDER INSTABILITY WITH POSTERIOR GLENOID BONE LOSS USING DISTAL TIBIA ALLOGRAFT AUGMENTATION- SHORT TERM OUTCOMES.

Ahmed Al-Hussain & Ivan H Wong

ORTHOPAEDICS

BACKGROUND: Several anatomical features contribute to posterior shoulder instability. Isolated soft tissue procedures in the presence of a significant glenoid bony pathology can result in high recurrence rates. The recognition of glenoid bone loss is essential for the success of the chosen treatment. The primary objective is to generate a safety profile for posterior anatomic glenoid reconstruction. The secondary objective is to evaluate the clinical trends and radiological outcomes of patients who underwent this procedure.

METHODS: This study is a retrospective review of medical charts and diagnostic images of subjects who had posterior shoulder instability with glenoid bone loss and underwent posterior anatomic glenoid reconstruction. Data was collected from pre and post-operative evaluations. This included an assessment by the Western Ontario Shoulder Instability (WOSI) index, as well as the pre-operative and post-operative imaging.

RESULTS: There were no intra-operative or post-operative complications. All subjects had a stable shoulder at latest follow-up. The overall mean pre-operative and post-operative WOSI scores (\pm SD) were 30.07 ± 10.84 and 65.25 ± 19.74 , respectively. There was strong statistical evidence to conclude that the Post-operative WOSI at 6 months increased significantly ($p=.009$). The diameter of the graft at the most recent follow up CT was adequate, and the graft was placed in an excellent position.

CONCLUSION: Arthroscopic posterior shoulder stabilization with distal tibia allograft reconstruction demonstrates promising clinical, functional and radiographic results with an excellent safety profile. However, further investigations are required to obtain the longevity of the positive outcomes.