00317 Does Diabetes Affect Outcomes of Arthroscopic Capsular Release?

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Aims: While the exact mechanism of primary adhesive capsulitis is unknown, we know that it has strong associations with diabetes mellitus (DM). Although self-limiting, a significant percentage of patients still have persistent pain and stiffness beyond 3 years. Arthroscopic capsular release (ACR) has been described as a successful intervention for recalcitrant adhesive capsulitis that provides early and long-term recovery. The aim of this study is to investigate the relationship between DM and ACR.

Methodology: We reviewed prospectively collected data of 56 consecutive patients with idiopathic frozen shoulder who underwent anterior inferior ACR under a single surgeon. Range of motion, pain score and shoulder function (Constant Shoulder Score, Oxford Shoulder Score, University of California Los Angeles Shoulder Score) were documented preoperatively and one year postoperatively. Patients were dichotomised into diabetic (n=32) and non-diabetic patients (n=24) and compared using a mixed ANOVA design to investigate for differences in outcomes.

Result: Both group of patients had significant improvement in range of motion, reduced pain scores and improved shoulder scores one year postoperative (p=0.00). Diabetic patients had poorer internal rotation (p=0.00), forward flexion (p=0.00) and poorer postoperative Constant Shoulder score (p <0.05). Otherwise both groups improved equally in all other aspects.

Conclusion: ACR offered good outcomes in both diabetic and non-diabetic patients. It offered good improvement in range of motion, effective pain relief and improvement in shoulder function. However diabetic patients had poorer improvement in internal rotation and forward flexion postoperatively. Preoperative counselling and postoperative rehabilitation can be tailored to better treat diabetic patients with idiopathic adhesive capsulitis.