

The Capsular Noose: A New Technique to Reduce Dislocation After Posterior, Single-Incision MIS THA

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INTRODUCTION: A new method of capsular repair advances the posterior capsular flap around the prosthetic neck creating a noose constraint around the head.

METHODS: 280 consecutive posterior MIS THA's underwent capsular noose reconstruction. 450 consecutive MIS THA's underwent standard posterior repair. 20 patients were studied intra-operatively to determine the amount of torque and degree of internal rotation to dislocation a) without capsular repair, b) with standard repair, and c) with noose repair.

RESULTS: After minimum 12 months follow-up, 1 patient dislocated in the capsular noose group (0.4%) while 20 patients dislocated in the standard repair group (4.4%, $p < 0.01$). Dislocation occurred at mean 49.8 degrees with no repair, 53.6 degrees with standard repair, and 66.4 degrees with noose repair ($p < 0.05$). Mean torques to dislocation were 0.68 N-m for no repair, 0.82 N-m for the standard repair, and 1.05 N-m for the noose repair ($p < 0.05$).

DISCUSSION: Capsular noose advancement enhances resistance to dislocation after posterior approach THA.