Can Lesser Trochanteric Iliopsoas Tenotomies Successfully Treat Central Labral Impingement?

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INTRODUCTION

Currently arthroscopic iliopsoas tenotomies (AIT’s) are performed at the level of the labrum to treat both labral impingement and painful snapping of the tendon.1,2

However, two recent studies reported that although labral-level tenotomies relieved painful labral impingement, recurrent snapping of the tendon occurred in 18-60% of their cases.3,4

The goal of this study was to determine if arthroscopic iliopsoas tenotomies done at the lesser trochanter would more effectively treat both central labral impingement and snapping of the tendon.

METHODS

Patients: From the author’s data base of 1200 hip arthroscopies, 30 patients that had AIT’s at the lesser trochanter to treat painful snapping tendons and “3 o’clock” labral injuries were identified.

Patient demographics:
- Average age: 26 years (range 15-57 years)
- Gender: 24 females and 6 males (14 competitive athletes)

RESULTS

Outcomes: assessed at each clinic visit with the modified Harris hip scoring system

All patients returned to prep activities and jobs by 6 months. One patient returned to heavy construction at 5 months and one woman was back walking 4 miles/day 3 months after her psoas tenotomy.

DISCUSSION

The lack of recurrent snapping observed in this study may be due to differences in the amount of tendon separation that occurs when releases are performed at the labral and trochanteric levels.

A recent study found that average psoas tendon separation was significantly less with labral-level tenotomies (0.8 cm vs. 1.3 cm) than with tenotomies performed at the lesser trochanter (p < 0.001)1

This may be due to the amount of muscle left intact: Cutting the iliopsoas tendon at the lesser trochanter (6) leaves only 45% of the muscle-tendon unit intact.

In contrast, cutting the tendon at the labrum (a) preserves 60% of the MTU; the increased amount of muscle that remains may more effectively tether and limit the amount of tendon separation.

SUMMARY: SNAPPING AND IMPINGEMENT

- Patients with painful snapping psoas tendons may also have labral injuries due to intra-articular impingement of the tendon.
- Diagnosis is made at arthroscopy when an anterior (3 o’clock) labral injury is found directly adjacent to the iliopsoas tendon.
- In patients with snapping tendons, results of a central tendon release are less predictable and recurrent snapping may occur.
- It appears that a lesser trochanteric release will more effectively treat both labral impingement and painful snapping of the tendon.

Selected References