THE PSOAS TENDON REGENERATES AFTER ARTHROSCOPIC TENOTOMY THROUGH THE CENTRAL COMPARTMENT OF THE HIP

Márquez W¹, Gómez-Hoyos J², Llano J³,⁸, Aguilera B⁴, Nossa J⁵, Márquez J⁶, Clavijo M⁶,⁷, Gallo J⁶,⁷

1. Department of Orthopedic Surgery, Clínica Las Américas
2. Department of Orthopedic Surgery, University of Antioquia
3. Department of Radiology, Clínica Las Américas
4. Joint Replacement Group, Centro Médico Imbanaco
5. Department of Orthopedic Surgery, FUCS
6. Department of Sports Medicine, Universidad de Antioquia
7. GRINMADE Research Group
8. IATM Research Group

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Snapping hip is characterized by snap of the hip that can be painful. The psoas tendon shifts from lateral to medial position, over the iliopectineal eminence or femoral head. Patients with persistent pain and functional limitation may improve with arthroscopic psoas tenotomy. There is concern about the effect on hip flexion strength. Our experience shows normal hip flexion returns a few months after the procedure. Our hypothesis is that the psoas tendon regenerates.
To evaluate whether the psoas tendon regenerates after arthroscopic tenotomy through the central compartment of the hip in patients with internal snapping hip.
Methods

27 patients with internal snapping hip

All underwent arthroscopic tenotomy of the psoas through the central compartment of the hip (Wensttein technique)

19 patients included

MRI: Phillips Achieva Nova Dual Series® of 1.5T
SPIR, proton density, sagittal T1 and axial proton density
Two radiologists

Variables
- Quantitative: Mean and standard deviation
- Nominal: Frequencies and proportions
- Comparison (pre and post): paired Student t or Wilcoxon tests

Data analysis: SPSS version 20.0

Eight had less than 6 months of follow-up

Preoperative MRI
Postoperative MRI

WOMAC Score (pre and post)
Flexion force of the hip (only post)

Measurement of the tendon perimeter
Preoperative MRI. Observe the continuous tendon in sagittal view before tenotomy.

Observe the discontinuous psoas tendon 20 days after tenotomy.

Postoperative MRI of a regenerated tendon with anteroposterior and transverse measures. Seven months after tenotomy.
Results I

- 8 patients excluded due to less than 6 months follow up
- 19 patients included (7 males, 12 female)
- Aged 18 to 54 years
- BMI: 24.81 ± 4.43
- All had femoroacetabular impingement
- Mean follow up of: 23.16 months
Results II

- Pain improved in all patients
- The mean WOMAC score improved in all patients
  - Pre: 49 ± 15.9 vs. Post: 10.74 ± 11.35 points, P <0.001
- Hip flexion force was 5/5 in all patients in the final follow up
- Psoas regeneration was observed in all patients
- On average, 84.3% of the perimeter of the psoas tendon was recovered
  - Pre: 55.44 ± 5.68 mm vs. Post: 46.71 ± 6.5 mm, P <0.001
Conclusions

- The psoas tendon regenerates after arthroscopic transcapsular tenotomy with radiofrequency in patients with internal snapping hip.
- Tendon thickness recovery averaged greater than 80% compared with the preoperative measurement.
- The function of hip flexion recovers in all patients.
References