

## Iliopsoas Related Pathology: Prevalence, Associated Findings, and Surgical Procedures from a Large Multicenter Hip Arthroscopy Study Group

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### Summary:

Iliopsoas related pathology in the hip is quite common (16.5%), infrequently treated with iliopsoas release (4.4%) but typically with capsular closure (96.1%), suggesting recent appreciation of the anterior stabilizing role and/or hip flexor role of this anatomic structure and perhaps the preference for additional anterior stability

### Abstract:

**Introduction:** Elucidate the prevalence, associated findings, and rendered arthroscopic surgical procedures of iliopsoas tendon pathology

**Methods:** IRB-approved retrospective review of prospective data base was performed from a large multi-centered hip arthroscopy study group. Inclusion criteria were pre-operative diagnosis of iliopsoas tendonitis and/or internal snapping symptoms and/or intra-operative anteroinferior (below 3 o'clock position) labral pathology attributed to iliopsoas impingement. Exclusion criteria are history of prior ipsilateral hip surgery. The control group consisted of arthroscopic surgical patients not meeting the inclusion or exclusion criteria. Comparative cohort demographics, pre-operative patient-reported outcome scores (IHOT-12, VAS score for pain), associated radiographic findings, intra-operative findings, and rendered procedures are investigated in this LOE 3 study.

**Results:** A total of 1252 patients were enrolled in the study of which 206 patients formed the study group and 1046 served as controls. The cohort demographics for age (36 years), height (68 inches), weight (160 pounds), and gender (41% female) did not differ between the groups ( $p>0.05$ ). There was a significant difference for pre-operative iHOT 12 with higher scores (38.59) in the study group compared to controls (33.83,  $p=0.004$ ) but no statistical difference in visual analog scale for pain between the groups. There was no significant difference in the incidence of cam deformity, global pincer deformity, or dysplasia between cohorts but there was a lower incidence of focal pincer impingement among patients with psoas involvement (22% vs 37.4%,  $p=0.001$ ). Only 9 of the subjects with psoas involvement underwent surgical psoas release. There was a higher incidence of acetabuloplasty (61% vs 50.7%,  $p=0.045$ ) and acetabular chondroplasty (69.4% vs 33.8%,  $p<0.001$ ) in the study cohort but no significant difference in femoroplasty or labral procedures between cohorts. Capsular closure was performed in the majority of both cohorts (96.1% vs 92.9%,  $p=0.121$ ).

**Discussion:** The most significant finding from this study is the low incidence of iliopsoas release (4.4%) for the large number of patients (16.5% of 1252 enrolled patients) with iliopsoas related pathology suggesting a more recent appreciation of the anterior stabilizing and/or hip flexor role of this anatomic structure.