

# OUTCOMES OF ARTHROSCOPIC HIP SURGERY IN PATIENTS WITH FEMORO-ACETABULAR IMPINGEMENT

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av  
**MIKAEL SANSONE**  
Leg läkare

Fakultetsopponent:  
**MARC R SAFRAN**  
Professor  
Stanford University, California, USA

## *Avhandlingen baseras på följande arbeten:*

**I.** Sansone M, Ahldén M, Jónasson P, Swärd L, Thomeé C, Thomeé R, Baranto A, Karlsson J (2013). A Swedish hip arthroscopy registry - demographics and development. *Knee Surg Sports Traumatol Arthrosc* 22 (4):774-780

**II.** Sansone M, Ahldén M, Jónasson P, Thomeé C, Swärd L, Öhlin A, Baranto A, Karlsson J, Thomeé R (2016). Outcomes after hip arthroscopy for femoroacetabular impingement in 289 patients with minimum 2 years follow up. *Scand Journal of Medicine and Science in Sports* DOI: 10.1111/sms.12641

**III.** Sansone M, Ahldén M, Jónasson P, Thomeé C, Swärd L, Baranto A, Karlsson J, Thomeé R (2015). Good Results After Hip Arthroscopy for Femoroacetabular Impingement in Top-Level Athletes. *Orthopaedic Journal Sports Medicine* 3 (2):2325967115569691

**IV.** Sansone M, Ahldén M, Jónasson P, Thomeé C, Swärd L, Baranto A, Collin D, Karlsson J, Thomeé R (2015). Outcome of hip arthroscopy in patients with mild to moderate osteoarthritis - A prospective study. *Journal of Hip Preservation Surgery* DOI:10.1093/jhps/hnv07

**V.** Sansone M, Ahldén M, Jónasson P, Thomeé R, Falk A, Swärd L, Karlsson J (2014). Can hip impingement be mistaken for tendon pain in the groin? A long-term follow-up of tenotomy for groin pain in athletes. *Knee Surg Sports Traumatol Arthrosc* 22 (4):786-792

**VI.** Sansone M, Ahldén M, Jónasson P, Swärd L, Eriksson T, Karlsson J (2013). Total dislocation of the hip joint after arthroscopy and ileopsoas tenotomy. *Knee Surg Sports Traumatol Arthrosc* 21 (2):420-423

**VII.** Ayeni OR, Sansone M, de Sa D, Simunovic N, Bedi A, Kelly BT, Farrokhyar F, Karlsson J (2016). Femoro-acetabular impingement clinical research: is a composite outcome the answer? *Knee Surg Sports Traumatol Arthrosc* 24 (1):295-301

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MIKAEL SANSONE

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Department of Orthopaedics  
Institute of Clinical Sciences  
at Sahlgrenska Academy  
University of Gothenburg  
Gothenburg, Sweden 2016

## ABSTRACT

Hip and groin problems are common, especially among athletes. The treatment of hip and groin problems has undergone rapid change during the latest 15 years, mainly due to our understanding of femoro-acetabular impingement (FAI). FAI consists of skeletal changes of the hip, which lead to a mismatch between the femoral head and pelvic socket, leading to collision and impingement. These changes are called cam when placed on the femoral side and pincer on the pelvic side. Technical advances have led to arthroscopic treatment as a standard procedure for treating FAI. The results after this treatment have, however, not been well investigated.

This thesis aims to investigate the results after arthroscopic treatment for FAI. A clinical register was created in order to evaluate and follow this patient category over time.

A long-term follow-up was made of patients who had undergone tenotomy in the groin region. This study showed that three out of four patients experienced good results after surgery. The patients with a poorer outcome had a significantly higher prevalence of FAI.

A database was created with the aim of evaluating patients treated arthroscopically for FAI. In an assessment of the first 606 patients in the database, it was seen that, when measured with modern and validated outcome measures, these patients reported substantial clinical symptoms.

A one-year follow-up of 85 elite athletes after arthroscopic treatment revealed good results, including less pain, improved function, quality of life and return to sports. A two-year follow-up of 289 patients with FAI treated arthroscopically showed significant improvements in terms of pain, function and quality of life. A two-year follow-up of 75 patients with FAI and concomitant mild to moderate osteoarthritis of the hip showed significant improvements in terms of pain, function and quality of life.

In a case report of two cases of total hip dislocation after hip arthroscopy and psoas tenotomy referred to us, the importance of dynamic and static stabilisers of the hip was highlighted.

A study of different outcomes used to evaluate patients with FAI reported on the use of composite outcomes to better evaluate this patient category.

**Keywords:** hip joint, hip, hip arthroscopy, femoro-acetabular impingement, register, cam, outcome, PROM, osteoarthritis, athlete

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**Correspondence to:**  
mikael.sansone@gmail.com