

Femoroacetabular Impingement Syndrome - Outcomes of Arthroscopic Hip Surgery

AKADEMISK AVHANDLING

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av

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Avhandlingen baseras på följande delarbeten

- I. Sansone M, Ahldén M, Jónasson P, Thomeé C, Swärd L, Öhlin A, Baranto A, Thomeé R. Outcome after hip arthroscopy for femoroacetabular impingement in 289 patients with minimum 2-year follow-up. *Scand J Med Sci Sports*. 2017;27(2):230-235.
- II. Öhlin A, Sansone M, Ayeni OR, Swärd L, Ahldén M, Baranto A, Karlsson J. Predictors of outcome at two-year follow-up after arthroscopic treatment of femoro-acetabular impingement. *J Hip Preserv Surg*. 2017;4(3):224-230.
- III. Öhlin A, Jónasson P, Ahldén M, Thomeé R, Baranto A, Karlsson J, Sansone M. The Hip Sports Activity Scale (HSAS) for patients with femoroacetabular impingement syndrome – validation in Swedish. *Transl Sports Med*. 2019;2:209-213.
- IV. Öhlin A, Karlsson L, Hamrin Senorski E, Jónasson P, Ahldén M, Baranto A, Ayeni OR, Sansone M. Quality assessment of prospective cohort studies evaluating arthroscopic treatment for femoroacetabular impingement syndrome – a systematic review. *Orthop J Sports Med*. 2019;7(5):2325967119838533.
- V. Öhlin A, Ahldén M, Lindman I, Jónasson P, Desai N, Baranto A, Ayeni OR, Sansone M. Good five-year outcomes after arthroscopic treatment for femoroacetabular impingement syndrome. *Knee Surg Sports Traumatol Arthrosc*. 2019 <https://doi.org/10.1007/s00167-019-05429-y>.

SAHLGRENKA AKADEMIN
INSTITUTIONEN FÖR KLINISKA VETENSKAPER



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Abstract

Hip and groin problems are common among young and active individuals. Femoroacetabular impingement (FAI) syndrome is an important cause of hip pain and reduced hip function among these patients. Due to bony abnormalities at the femoral head and neck junction and/or the acetabular rim, FAI syndrome may result in abnormal contact between these structures. Recent advancements in hip arthroscopy have made it possible to treat this condition with a minimally-invasive approach and is today the standard procedure. Initial results of the treatment have been promising and there is emerging scientific evidence of promising outcome at long-term follow-up.

This thesis aims to evaluate the medium to long term outcome of arthroscopic treatment for FAI syndrome and predictors of treatment outcome, and to evaluate the methodological quality of the current evidence for arthroscopic treatment for FAI syndrome.

A prospective cohort study including 289 patients evaluated the outcome of arthroscopic treatment for FAI syndrome at two-year follow-up using patient-reported outcome measures. A significant and clinically relevant improvement was noted. A retrospective cohort study including 198 patients evaluated predictors of treatment outcome at two-year follow-up using a multiple linear regression analysis. A higher pre-operative patient-reported hip function was associated with a higher post-operative patient-reported hip function. A cross culturally adaption and validation of a patient reported outcome measure to evaluate level of physical activity was performed. The Swedish version was deemed to be a reliable and valid measurement to determine level of physical activity in patients with FAI syndrome. A systematic review evaluated the methodological quality of prospective cohort studies on arthroscopic treatment for FAI syndrome. A total of 53 studies were included and the methodological quality of included studies were deemed to be of moderate quality for both non-comparative and comparative studies. A prospective cohort study including 184 patients evaluated the outcome of arthroscopic treatment for FAI syndrome at five-year follow-up using patient-reported outcome measures. A significant and clinically relevant improvement was noted.

Keywords: femoroacetabular impingement syndrome, hip arthroscopy, register, systematic review