

## **Knee Arthroscopy due to degenerative knee disease - Evidence and practice Nationwide incidence trends of surgery in Finland and in Sweden**

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**Background:** Population-based incidence rates and trends of knee arthroscopy due to degenerative knee disease or meniscal tears are not known. Neither is it known whether previous high-quality RCTs not favoring arthroscopic meniscal resection in the treatment of knee OA and degenerative meniscal tears have been embodied in clinical practice or had an effect on the use of diagnose codes in Europe. The aim of this study was to assess the incidence of knee arthroscopy due to degenerative knee disease and meniscal tears in Finland and in Sweden and to examine the trends in arthroscopic surgical treatment.

**Methods:** We conducted a nationwide register-based study including all adult ( $\geq 18$ y) inpatient and outpatient arthroscopic surgery due to degenerative knee disease and meniscal tears in Finland between 1997 and 2012 and in Sweden between 2001 and 2012.

**Results:** During the study period in Finland between 1997 and 2012, altogether 294,232 knee arthroscopies due degenerative knee disease or traumatic meniscal tears were identified while the number in Sweden between 2001 and 2012 was 115,907. In Finland, the incidence was 350 per 100,000 person-years in 1997 and the incidence increased until 2006 (incidence 390 per 100,000 person-years). After that the incidence has declined to 251 per 100,000 person-years in 2012 (decline being 36%). In Sweden, the corresponding incidence of arthroscopy increased steadily until 2008 (incidence 146 per 100,000 person-years) after which it has declined to 93 per 100,000 person-years (decline being 36%). In both countries, the highest incidence rates were found among persons aged 40-59. In Finland, an increase in debridement knee arthroscopies with traumatic meniscal tear diagnosis was found after 2008.

**Conclusion:** The incidence of arthroscopies due to degenerative knee disease has declined during the past years but is still high. The incidence is two times higher in Finland compared to Sweden. Implementation of new high-quality evidence in clinical practice needs to be encouraged.