

Cruciate ligament injury and risk of knee osteoarthritis. Socioeconomic aspects.

ABSTRACT

Objective: To study the association between Cruciate Ligament (CL) injury and development of post-traumatic osteoarthritis in the knee and the impact of socioeconomic factors.

Design: Population based cohort study; Level of evidence II-2

Setting: Sweden, 1987-2009.

Participants: All patients aged between 15-60 years being diagnosed and registered with a CL injury in The National Swedish Patient Register between 1987 and 2009.

Main outcome measures: Knee osteoarthritis

Results: A total of 64,614 patients diagnosed with CL injury during 1987 to 2009 in Sweden were included in the study. Seven percent of the patients were diagnosed with knee OA during the follow-up (mean 9 years). Stratified analysis by follow-up showed that while those with shorter follow-up had a non-significant difference in risk (0.99, 95%CI 0.90-1.09 for follow-up less than five years compared with the non-operated cohort) those with longer follow-up had an increased risk of knee OA after CL reconstruction (HR=1.42, 95%CI 1.27-1.58 for follow-up more than ten years compared with non-operated cohort). The risk to develop OA was not affected by sex. Socioeconomic factors had an impact on both treatment and outcome.

Conclusion: CL reconstructive surgery does not seem to have a protective effect on long term OA in either men or women.