

Is arthroscopic surgery warranted for degenerative knee disease?

Clinical
Question

What are the benefits and harms of arthroscopic surgery, including debridement, partial menisectomy or both, compared with placebo surgery or non-surgical treatment in people with degenerative knee disease (osteoarthritis, degenerative meniscal tears, or both)?

Bottom Line

The findings of this review demonstrate that arthroscopic surgery for people with symptomatic degenerative knee disease (average age ranging from 46 to 65 years; 56% women), provides little or no clinically important benefit in pain or function, probably does not provide clinically important benefits in knee-specific quality of life, and may not improve treatment success compared with placebo surgery. These results apply to people with knee osteoarthritis with or without meniscal tears, as well as people with meniscal tears alone.

Arthroscopic surgery may or may not increase serious and total adverse events compared to control. Serious adverse events include deep venous thrombosis, myocardial infarction, pulmonary embolism, infection and death, and are likely mostly attributable to the arthroscopic surgery. Arthroscopic surgery may lead to greater progression of knee osteoarthritis and may or may not slightly increase subsequent knee surgery (replacement or osteotomy).

Caveat

Overall, the trials included participants and interventions that are largely reflective of clinical practice, indicating that the results of the review can be broadly applied to practice. For the primary outcomes pain and knee function the overall certainty of the evidence was high. The evidence provided for quality of life was moderate and due potential publication bias and low numbers, adverse event outcomes were rated as low.

Context

Arthroscopic knee surgery remains a common treatment for symptomatic knee osteoarthritis, including for degenerative meniscal tears, despite guidelines strongly recommending against its use.

Cochrane Systematic Review

O'Connor D, Johnston RV, Brignardello-Petersen R, Poolman RW, Cyril S, Vandvik PO, Buchbinder R. Arthroscopic surgery for degenerative knee disease (osteoarthritis including degenerative meniscal tears). Cochrane Database of Systematic Reviews 2022, Issue 3. Art. No.: CD014328. DOI: 10.1002/14651858.CD014328. This review contains 16 trials with a total of 2,105 participants.

Pearls No. 697, March 2022, written by Assoc Professor Vanessa MB Jordan.

Systematic review link:

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD014328/full