



Effective Health Care

Comparative Safety and Effectiveness of Surgical or Conservative Therapy to Treat ACL Tears

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The topic, *Comparative Safety and Effectiveness of Surgical or Conservative Therapy to Treat Anterior Cruciate Ligament (ACL) Tears*, was found to be addressed by a two recently published systematic reviews identified in a search of the literature. Given that these existing systematic reviews cover this nomination, no further activity will be undertaken on this topic.
 - Chalmers PN, Mall NA, Moric M, et al. Does ACL reconstruction alter natural history? A systematic literature review of long-term outcomes. *J Bone Joint Surg Am*. 2014; 96(4):292-300. PMID: 24553885.
 - Smith TO, Postle K, Penny F, et al. Is reconstruction the best management strategy for anterior cruciate ligament rupture? A systematic review and meta-analysis comparing anterior cruciate ligament reconstruction versus non-operative treatment. *Knee*. 2014; 21(2):462-70. PMID: 24238648.
- The American Academy of Orthopedic Surgeons/American Association of Orthopedic Surgeons (AAOS) is also in the process of developing an evidence-based clinical practice guideline titled, *The Treatment of Anterior Cruciate Ligament (ACL) Injuries*, which is expected to be completed this year (see http://www.aaos.org/research/guidelines/Guideline_Progress.asp).

Topic Description

Nominator(s): Individual
Nomination Summary: This topic was nominated by an individual who has torn both anterior cruciate ligaments (ACLs). The nominator is interested in the comparative effectiveness of ACL treatment options, including conservative rehabilitation options such as physical therapy..

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Population(s): Patients with an ACL tear
Intervention(s): Surgery, Conservative Therapy (e.g., physical therapy)
Comparator(s): Those listed above (i.e., compared to each other)
Outcome(s): Disability, level of pain, quality of life, time to return to sports activity, occurrence of adverse events

Key Questions from Nominator: What is the comparative safety and effectiveness of surgical or conservative therapy for the treatment of ACL tears?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see [http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.](http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/))
- ACL tears are the most common ligament injury in the US. Annual incidence exceeds 200,000 cases.
- The condition disproportionately affects people engaging in physical activity .Women are also particularly susceptible, with a rate of ACL injury 2 to 8 times higher than their male counterparts.
- Patients with ACL tears are offered a variety of treatment options including surgery to repair the torn ligament and conservative therapy with physical therapy. Selection of the appropriate treatment is often influenced by patient age, level of pain and disability, and desired level of activity.
- The topic was found to be addressed by two existing systematic reviews. The first review, *Does ACL reconstruction alter natural history?* (2014), compared the outcomes of patients who underwent surgical repair to those who were managed non-operatively. It is important to note that the systematic review relies primarily on cohort studies rather than randomized controlled trials (RCTs).
- The second review, *Is reconstruction the best management strategy for anterior cruciate ligament rupture?* (2014), also compared the outcomes of surgical treatment to non-operative therapies. Sixteen studies, including 2 RCTs and fourteen non-randomized controlled trials, were included in the systematic review.
- There are very few RCTs or other controlled clinical trials (CCTs) specific to conservative therapy or comparing conservative and surgical treatment options. As such, there is little new evidence published since the time of the previously discussed systematic reviews that would alter the conclusions reached in those documents.
- The American Academy of Orthopedic Surgeons/American Association of Orthopedic Surgeons (AAOS) is also in the process of developing an evidence-based clinical practice guideline titled, *The Treatment of Anterior Cruciate Ligament (ACL) Injuries*, which is expected to be completed this year and may also be relevant to the topic.