

Can the non-operative management of patients with meniscal tears produce successful clinical outcomes?

To answer this question, we performed a comprehensive search of the PubMed database (May 2012) for randomized, controlled trials that addressed this specific research question.

The best available evidence from our search consisted of a retrospective review (1), a prospective clinical trial (2), and a randomized trial (3).

Lim et al performed a retrospective chart review among 30 mostly female patients who completed non-operative treatment for degenerative posterior root tear of the medial meniscus (1). Treatment consisted of supervised therapy, exercises, and NSAIDs for 8-12 wks (1). The authors concluded that clinical outcomes of self-reported pain and function improved during the follow-up period, an average of 36 mos (1). However, the study is limited in that the design did not allow for blinding of participants or a control group.

Rimington et al conducted a prospective trial among 26 patients with degenerative medial meniscus tear, comparing non-operative treatment consisting of NSAIDs to operative treatment (2). Almost half of patients improved with non-operative treatment, while remainder did not improve and chose to undergo operative treatment (2). At conclusion of treatment, subjects in both groups showed improved pain and function as assessed by questionnaire (2). Of note, a greater percentage of men elected surgery compared to women (72% vs 13%) (2). Limitations of this study include a lack of randomization, possibility of selection bias, and treatment until improvement was demonstrated on primary outcomes.

Herrlin et al randomized 90 middle-aged patients with degenerative medial meniscal tears to surgery followed by 8 wks of exercise or exercise alone, and found similar improvements in patient questionnaires for pain, function, symptoms, and activity (3). Limitations of this study include lack of blinding and no control group.

Based on this review, it can be concluded that non-operative management of meniscal tears shows promise in achieving successful clinical outcomes in a large percentage of the patients, and should be considered as the initial treatment approach.

Check with the provider of this newsletter to learn more about exercises appropriate for this condition.

1. Lim HC, Bae JH, Wang JH, Seok CW, Kim MK. Non-operative treatment of degenerative posterior root tear of the medial meniscus. *Knee Surg Sports Traumatol Arthrosc.* 2010 Apr;18(4):535-9. Epub 2009 Aug 27. PubMed PMID: 19711053.
2. Rimington T, Mallik K, Evans D, Mroczek K, Reider B. A prospective study of the nonoperative treatment of degenerative meniscus tears. *Orthopedics.* 2009 Aug;32(8). pii: orthosupersite.com/view.asp?riD=41915. doi: 10.3928/01477447-20090624-06. PubMed PMID: 19708634.
3. Herrlin S, Hållander M, Wange P, Weidenhielm L, Werner S. Arthroscopic or conservative treatment of degenerative medial meniscal tears: a prospective randomised trial. *Knee Surg Sports Traumatol Arthrosc.* 2007 Apr;15(4):393-401. Epub 2007 Jan 10. PubMed PMID: 17216272.