

Evidence Based Guideline

Arthroscopic Debridement and Lavage as Treatment of Knee Osteoarthritis

File Name: arthroscopic_debridement_and_lavage_as_treatment_of_knee_osteoarthritis
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Description of Procedure or Service

Arthroscopic lavage and cartilage debridement are operative treatments for osteoarthritis (OA). Lavage is a procedure in which intra-articular fluid is aspirated and the joint is washed out, removing inflammatory mediators, debris, or small loose bodies from the osteoarthritic knee. Articular debridement involves removal of cartilage or meniscal fragments, but also can include cartilage abrasion, excision of osteophytes, and synovectomy. Debridement is intended to improve symptoms and joint function in patients with mechanical symptoms such as locking or catching of the knee. Because lavage and debridement are often performed at the same time, it is difficult to attribute the success or failure of arthroscopy to a specific procedure.

Osteoarthritis (OA) affects about 21 million people in the United States. By age 65 years, the majority of the population has radiographic evidence of osteoarthritis and 11% have symptomatic OA of the knee. The diagnosis of osteoarthritis is established using a combination of clinical information derived from history, physical examination, radiologic imaging, and laboratory evaluation. An algorithm of diagnostic criteria for OA of the knee has been proposed by the American College of Rheumatology (ACR). The diagnosis of OA of the knee is defined as presenting with pain and meeting at least five of the following criteria:

- Patient older than 50 years of age
- Less than 30 minutes of morning stiffness
- Crepitus (noisy, grating sound) on active motion
- Bony tenderness
- Bony enlargement
- No palpable warmth of synovium
- Erythrocyte sedimentation rate (ESR) <40 mm/hr
- Rheumatoid factor <1:40
- Noninflammatory synovial fluid.

The presence of clinical symptoms of OA does not always correlate well with the degree of abnormality seen radiographically. It has been noted that approximately 40% of patients who have severe findings on x-rays report no symptoms; conversely, patients with clinical symptoms may show no significant radiological changes.

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Treatment for OA of the knee aims to alleviate pain and improve function to mitigate reduction in activity. However, most treatments do not modify the natural history or progression of OA, and thus are not considered curative. Nonsurgical modalities that are used include exercise; weight loss; various supportive devices; acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen; nutritional supplements (glucosamine and chondroitin); and intra-articular viscosupplements. Corticosteroid injection may be considered when relief from NSAIDs is insufficient or the patient is at risk from gastrointestinal adverse effects. If symptom relief is inadequate with conservative measures, invasive treatments may be considered. Operative treatments for symptomatic OA of the knee include arthroscopic lavage and cartilage debridement, osteotomy, and ultimately total joint arthroplasty. Surgical procedures intended to repair or restore articular cartilage in the knee, e.g., abrasion arthroplasty, microfracture techniques, and autologous chondrocyte implantation, are appropriate only for younger patients with focal cartilage defects secondary to injury and are not addressed in this policy.

*****Note: This Evidence Based Guideline is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

Evidence Based Guideline for Arthroscopic Debridement and Lavage as Treatment of Knee Osteoarthritis

Arthroscopic debridement and/or lavage is not recommended for treatment of osteoarthritis of the knee.

Note: Arthroscopic debridement may be recommended when preoperative imaging indicates that specific anatomic lesions other than osteoarthritis, e.g., large meniscal tears, loose bodies, are the cause of the patient's symptoms regardless of the presence of osteoarthritis.

Medical Evidence regarding Arthroscopic Debridement and Lavage as Treatment of Knee Osteoarthritis indicates it is not recommended in the following situations

In evaluating the data from well-designed controlled trials, sufficient evidence was provided to conclude that arthroscopic debridement and lavage, separately or together, do not improve symptoms of OA of the knee and, therefore, are not recommended.

Guideline recommendations from the American Academy of Orthopaedic Surgeons in December 2008 indicate: "We recommend against performing arthroscopy with debridement or lavage in patients with a primary diagnosis of symptomatic OA (osteoarthritis) of the knee."

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

Billing/Coding/Physician Documentation Information

This guideline may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: 29871, 29874, 29877

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Scientific Background and Reference Sources

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.117, 4/24/09

Senior Medical Director review 8/2010

American Academy of Orthopaedic Surgeons (AAOS). Treatment of Osteoarthritis of the Knee (Non-arthroplasty). 12/2008. Retrieved July 23, 2010 from <http://www.aaos.org/Research/guidelines/OAKguideline.pdf>

Zhang W, Moskowitz RW, Nuki G et al. OARSI recommendations for the management of hip and knee osteoarthritis. Part KK: OARSI evidence-based, expert consensus guidelines. Osteoarthritis Cartilage 2008; 16(2):137-62. Retrieved on July 23, 2010 from http://www.oarsi.org/pdfs/oarsi_recommendations_for_management_of_hip_and_knee_oa.pdf

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.117, 12/09/10

Specialty Matched Consultant Advisory Panel review 2/2011

Policy Implementation/Update Information

- 8/31/10 New Evidence Based Guideline developed. Arthroscopic debridement and/or lavage is not recommended for treatment of osteoarthritis of the knee. Note: Arthroscopic debridement may be recommended when preoperative imaging indicates that specific anatomic lesions other than osteoarthritis, e.g., large meniscal tears, loose bodies, are the cause of the patient's symptoms regardless of the presence of osteoarthritis. (mco)
- 3/15/11 Specialty Matched Consultant Advisory Panel review 2/2011. References updated. (mco)

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