MEDICAL POLICY – 7.01.549
Knee Arthroscopy in Adults

Effective Date: March 1, 2017
Last Revised: Dec. 21, 2017
Replaces: N/A

RELATED MEDICAL POLICIES:
1.03.501 Knee Braces
7.01.15 Meniscal Allograft and Other Meniscus Implants
7.01.550 Knee Arthroplasty in Adults

Select a hyperlink below to be directed to that section.

POLICY CRITERIA | CODING | RELATED INFORMATION
EVIDENCE REVIEW | REFERENCES | HISTORY

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Introduction

The knee is a complex joint that includes multiple components. Knee pain can be caused by many different conditions including bending or using the knee too much, arthritis, swelling, fluid collection, tears in any of four different ligaments or in the meniscus (a cushion of cartilage), muscle strains, injuries, infections, or hip problems. Most often knee pain improves with rest, ice, and pain relieving medications. When knee pain is associated with an injury or pain is worsening or fails to improve after several days, tests or x-ray studies may help to determine the cause and direct the best treatment. Technology has led to the development of a process known as arthroscopy in which the inside of the knee can be visualized and treated. Small incisions (cuts) are made in the knee to allow the surgeon to insert a narrow tube with a camera into the area. The camera sends images to a monitor, which allows the inside of the knee and its structures be viewed in detail. Arthroscopy can also be used to diagnose and treat specific knee problems such as repairing the knee or removing damaged tissue. This policy describes when knee arthroscopy is covered by the health plan. For some conditions, a trial of conservative care including physical therapy, time, and medication is recommended before arthroscopy.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.
This policy addresses knee arthroscopy in the adult population only, age greater than 18.

**Hyperlinks to criteria:**

<table>
<thead>
<tr>
<th>Anterior cruciate ligament (ACL) tear</th>
<th>Meniscal tear</th>
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</thead>
<tbody>
<tr>
<td>Arthroscopic debridement, drainage, or lavage</td>
<td>Osteochondral defect</td>
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<tr>
<td>Chondromalacia patellae (patellar compression syndrome)</td>
<td>Popliteal (Baker) cyst</td>
</tr>
<tr>
<td>Intra-articular joint pathology</td>
<td>Posterior cruciate ligament (PCL) tear</td>
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<tr>
<td>Synovial disorders</td>
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<table>
<thead>
<tr>
<th>Indication</th>
<th>Medical Necessity</th>
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| Meniscal tear | Knee arthroscopy may be considered medically necessary for meniscal tear when ALL of the following criteria are met:  
  - Clinical documentation confirms presence of **ONE** of the following:  
    o Positive McMurray test  
    o Positive Apley test  
    o Joint line tenderness with palpation  
    o Copy of radiologist’s report for diagnostic imaging (MRI, CT, etc.) done within the past 12 months prior to surgery that demonstrates torn or displaced meniscus (e.g., bucket handle tear, radial tear, posterior horn tear). Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede  
    o Meniscus tear coincident with ACL injury, discovered during arthroscopy for ACL  
  AND  
  - **ONE** of the following:  
    o Symptomatic acute tear (that happened suddenly, over 24-48 hours) on exam with impaired function such as knee locking, giving way or loss of range of motion (ROM)  
  OR  
    o A medically necessary ACL repair or reconstruction has been |
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<tr>
<td>Medical Necessity approved OR</td>
<td>8 weeks of conservative care has been tried and failed (eg, PT, activity modification, oral analgesics)</td>
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<td>AND</td>
<td>If age 50 and older, imaging shows the absence of severe arthritis (ie, large osteophytes, marked narrowing of joint space, severe sclerosis and definite deformity of bone contour)</td>
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<tr>
<td>Anterior cruciate ligament (ACL) tear</td>
<td>Knee arthroscopy may be considered medically necessary for ACL tear when ALL of the following criteria are met:</td>
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<td>Clinical documentation confirms presence of ONE of the following:</td>
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<td>- Positive anterior drawer sign (laxity)</td>
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<td>- Positive pivot shift test</td>
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<td>- Positive Lachman test</td>
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<td>- Copy of radiologist’s report for diagnostic imaging (MRI, CT, etc.) done within the past 12 months prior to surgery that demonstrates ACL tear. Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede.</td>
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<td>ONE of the following:</td>
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<td>- 2 weeks of conservative care has been tried and failed (eg, PT, activity modification, oral analgesics)</td>
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<td>- ACL tear occurred In conjunction with meniscus tear or ligamentous injuries (ie, medial or posterior collateral ligament, posterior cruciate ligament, or posterolateral corner ligamentous injury)</td>
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<td>- Physically demanding occupation (eg, firefighter, law enforcement, construction), or an activity level that includes cutting, jumping, and/or pivoting (eg, skiing, basketball, football)</td>
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<tr>
<td>Posterior cruciate ligament (PCL) tear</td>
<td>Knee arthroscopy may be considered medically necessary for PCL tear when ALL of the following criteria are met:</td>
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<td></td>
<td>Clinical documentation confirms presence of ONE of the following:</td>
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<td>- Positive posterior drawer sign (laxity)</td>
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<td>- Positive reversed pivot shift test</td>
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<td>- Positive posterior sag sign</td>
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<td></td>
<td>- Copy of radiologist’s report for diagnostic imaging (MRI, CT, etc.)</td>
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<tr>
<td>Indication</td>
<td>Medical Necessity</td>
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<td>done within the past 12 months prior to surgery that demonstrates PCL tear. Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede.</td>
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<tr>
<td><strong>AND</strong></td>
<td>PCL tear occurred in conjunction with meniscal tear or ligamentous injuries (ie, injury to posterolateral corner of the knee, medial collateral ligament tear, ACL tear, avulsion fracture of fibular head or avulsion of the tibia distal to the lateral plateau)</td>
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</table>

**Arthroscopic debridement, drainage, or lavage**

Knee arthroscopy may be considered medically necessary for arthroscopic debridement, drainage, or lavage when ONE of the following is present:

- Rheumatoid arthritis

**OR**

- Septic joint or osteomyelitis

**OR**

- Septic prosthetic joint

**OR**

- Arthrofibrosis as indicated by **ALL** of the following:
  - Loss of range of motion
  - Symptoms have not responded to 8 weeks of conservative care (eg, PT, activity modification, oral analgesics)

Arthroscopic debridement, drainage and/or lavage for the treatment of osteoarthritis of the knee in the absence of any other findings is considered not medically necessary.

**Intra-articular joint pathology**

Knee arthroscopy may be considered medically necessary for intra-articular joint pathology when ONE of the following is present:

- Mechanical symptoms (including locked knee or giving way), and a loose or foreign body seen on imaging study

**OR**

- Chronic knee pain with unknown etiology, nondiagnostic imaging studies, and symptoms have not responded to 8 weeks of conservative care (eg, PT, activity modification, oral analgesics)

**Osteochondral defect**

Knee arthroscopy may be considered medically necessary for osteochondral defect when imaging studies demonstrate the presence of an osteochondral lesion or loose body.
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<th>Indication</th>
<th>Medical Necessity</th>
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<tbody>
<tr>
<td>Copy of radiologist's report for diagnostic imaging (MRI, CT, etc.) done within the past 12 months prior to surgery that shows the presence of an osteochondral lesion or loose body. Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede.</td>
<td></td>
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</tbody>
</table>
| **Chondromalacia patellae (patellar compression syndrome)** | **Knee arthroscopy may be considered medically necessary for chondromalacia patellae (patellar compression syndrome) when ONE of the following is present:**  
  - Positive patella glide test  
  OR  
  - Positive patella tilt test  
  OR  
  - Articular cartilage lesion and ALL of the following:  
    o Symptoms attributed to chondral injury  
    o Copy of radiologist’s report for diagnostic imaging (MRI, CT, etc.) done within the past 12 months prior to surgery that demonstrates a cartilage defect. Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede.  
    o Symptoms have not responded to 8 weeks of conservative care (eg, PT, activity modification, oral analgesics) |
| **Popliteal (Baker) cyst**                       | **Knee arthroscopy may be considered medically necessary for popliteal (Baker) cyst when BOTH of the following are present:**  
  - Visible or palpable bulge in popliteal fossa on clinical exam, or diagnostic imaging demonstrates presence of the cyst  
  AND  
  - Symptoms have not responded to 8 weeks of conservative care (eg, PT, activity modification, oral analgesics) |
| **Synovial disorders**                          | **Knee arthroscopy may be considered medically necessary for synovial disorders such as ONE of the following:**  
  - Rheumatoid arthritis  
  OR  
  - Hemophilic joint disease  
  OR  
  - Localized pigmented villonodular synovitis |
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<tr>
<th>Indication</th>
<th>Medical Necessity</th>
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<tbody>
<tr>
<td><strong>OR</strong></td>
<td>Other chronic inflammatory conditions (eg, antibiotic-resistant Lyme arthritis)</td>
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## Coding

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>CPT</strong></td>
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<tr>
<td>29870</td>
<td>Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)</td>
</tr>
<tr>
<td>29871</td>
<td>Arthroscopy, knee, surgical; for infection, lavage and drainage</td>
</tr>
<tr>
<td>29873</td>
<td>Arthroscopy, knee, surgical; with lateral release</td>
</tr>
<tr>
<td>29874</td>
<td>Arthroscopy, knee, surgical; for removal of loose body or foreign body, (eg, osteochondritis dissecans fragmentation, chondral fragmentation)</td>
</tr>
<tr>
<td>29875</td>
<td>Arthroscopy, knee, surgical; synovectomy, limited (eg, plica or shelf resection)</td>
</tr>
<tr>
<td>29876</td>
<td>Arthroscopy, knee, surgical; synovectomy, major, 2 or more compartments (eg, medial or lateral)</td>
</tr>
<tr>
<td>29877</td>
<td>Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)</td>
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<tr>
<td>29879</td>
<td>Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture</td>
</tr>
<tr>
<td>29880</td>
<td>Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed</td>
</tr>
<tr>
<td>29881</td>
<td>Arthroscopy, knee, surgical; with meniscectomy (medical OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed</td>
</tr>
<tr>
<td>29882</td>
<td>Arthroscopy, knee, surgical; with meniscus repair (medical OR lateral)</td>
</tr>
<tr>
<td>29883</td>
<td>Arthroscopy, knee, surgical; with meniscus repair (medical AND lateral)</td>
</tr>
<tr>
<td>29884</td>
<td>Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)</td>
</tr>
<tr>
<td>29888</td>
<td>Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction</td>
</tr>
<tr>
<td>29889</td>
<td>Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction</td>
</tr>
</tbody>
</table>
Related Information

Definition of Terms

**Anterior drawer test:** A test used in the initial clinical assessment of suspected rupture of the cruciate ligaments in the knee. With the patient supine, flex hip and knee to 45-90 degrees, with foot stabilized on exam table and hamstrings relaxed, apply frequent manual gentle anteroposterior forces to proximal tibia, and measure tibia antero-posterior displacement in flexed knee. If displacement is greater than 6 mm compared to unaffected leg, it may indicate ACL tear.

**Apley test:** A test used to evaluate problems of the meniscus. The patient lies face down on table and flexes the knee to a 90 degree angle. The examiner places their own knee across the posterior aspect of the patient’s thigh. The tibia is then compressed onto the knee joint while being externally rotated. If pain is produced, this constitutes a positive test.

**Chondromalacia patella:** Pathologic changes in the articular cartilage of the patella, such as softening, erosion, and fragmentation. Unlike the damage to cartilage caused by arthritis, damage caused by chondromalacia can often heal.

**Chondroplasty:** This term refers to a technique in which an arthroscopy shaver blade is used to smooth the rough edges and remove the loose articular cartilage (joint surface) around a defect in the articular cartilage. It is a basic treatment option for articular cartilage pathology found incidentally on diagnostic arthroscopy.

**Knee giving way:** The knee is held together by ligaments, and the sensation of instability, or the knee giving out, is often due to a tear in one of the knee ligaments or meniscus.

**Knee locking:** The sudden inability to either bend or straighten the knee. This is usually caused by a mechanical block to knee motion and is accompanied by significant pain. The most common cause is a fragment of torn meniscal tissue that becomes stuck between the articular surfaces.

**Lachman test:** A positive test is the absence of sensation of a solid stop (end point) to anterior displacement of tibia (soft end point) compared to unaffected leg.
McMurray test: A test used to evaluate individuals for tears in the meniscus of the knee. It is a rotation test for demonstrating torn cartilage of the knee. A tear in the meniscus may cause a pedunculated tag of the meniscus which may become jammed between the joint surfaces.

Microfracture: A technique in which the surgeon uses an icepick like tool to penetrate the bone surface just under the articular cartilage in a defect where articular cartilage has died and flaked off the underlying bone. The principle is based on the idea that the marrow element cells released by this micro fracture will fill the joint surface defect and mature into tissue to replace the lost cells. This works best when the defect is less than 2 centimeters in diameter and the patient is less than 30 years of age.

Patella tilt test: A test that assesses the amount of patellar tilt which can be elicited by an examiner. The examiner presses posteriorly on the medial aspect of the patella with knee extended. If lateral aspect of patella does not rise past horizontal, may indicate lateral tightness.

Patellar glide test: A test where the patella is manually displaced laterally and medially with the knee extended and the quadriceps relaxed. Translation less than one-quarter of the patella’s width signifies a tight retinaculum, while translation of three-quarters of the patella’s width signifies a hypermobile patella.

Patellofemoral pain syndrome: Anterior knee pain involving the patella and retinaculum that excludes other intraarticular and peripatellar pathology. The pain worsens with prolonged sitting or when descending stairs. It is a complex symptom and is a diagnosis of exclusion.

Positive pivot shift test: A test performed under anesthesia that attempts to reproduce subluxation of tibia on the femur. The lateral pivot shift test combines valgus stress (pushing outside of knee medially) with twisting force while knee is being flexed. A positive test consists of a notable thud or jerk.

Evidence Review

Description

Knee arthroscopy is a surgical procedure performed through small incisions. During the procedure, the surgeon inserts an arthroscope into the knee joint. The arthroscope sends the image to a monitor so the structures of the knee can be observed in great detail.
arthroscope is used to feel, repair or remove damaged tissue. To do this, small surgical instruments are inserted through separate incisions around the knee.

Knee arthroscopy is the most commonly performed orthopedic procedure. Indications include diagnostic arthroscopy, meniscectomy, loose body removal, chondroplasty, microfracture, irrigation and debridement, and ligament reconstruction.

The two most frequent operative procedures in knee arthroscopy are meniscectomy and chondroplasty. Areas of cartilage degeneration or damage can be treated with chondroplasty, Rough and unstable cartilage lesions are treated with the use of an oscillating shaver, curettes, and other debridement tools. Unstable cartilage is removed with care taken neither to damage healthy cartilage nor to expose bare bone. Microfracture chondroplasty is one advanced technique for treating cartilage damage.

**Intra-articular Joint Pathology**

Synovial plicae are membranous inward folds of the synovial lining of the knee joint capsule. Such folds are regularly found in the human knee, but most are asymptomatic and of little clinical consequence. However, they can become symptomatic and cause knee pain. Medial plica irritation of the knee is a common source of anterior knee pain. The main complaint is an intermittent, dull, aching pain in the area medial to the patella above the joint line and in the supramedial patellar area. Pain increases with activity, especially when knee flexion and extension are required. Treatment includes physiotherapy, reducing activity, and rest. In cases that do not respond initially to an exercise program, corticosteroid injections and non-steroidal anti-inflammatory medication are given. Results of conservative treatment seem to be more appropriate in young patients with a short duration of symptoms. If conservative treatment fails, surgical treatment using arthroscopy is appropriate. During arthroscopy, excision of the whole plica should be achieved.¹

Articular cartilage lesions of the knee are most commonly treated with chondroplasty or microfracture chondroplasty.

**Osteochondral Dissecans**

Juvenile osteochondritis dissecans (JOCD) has been a recognized entity for more than 100 years. Despite long recognition of OCD, the natural history and most effective therapies are poorly understood. Although conclusive evidence of an exact cause is lacking, there is widespread
agreement that JOCD is related to repetitive trauma. Patients with JOCD present with vague pain and occasionally, mechanical symptoms. The diagnosis of JOCD can be confirmed on plain radiographs. Magnetic resonance imaging has emerged as the study of choice to evaluate the stability of the lesion and integrity of the overlying articular cartilage. Treatment decisions are based on the stability of the lesion. Stable JOCD lesions should be treated initially with activity modification and possibly, immobilization. Unstable lesions and stable lesions not responding to an initial course of nonoperative therapy should be surgically treated. Surgical treatment is based on the radiographic and arthroscopic characteristics of the lesion. Multiple techniques from simple arthroscopic drilling and fixation to salvage techniques for cartilage restoration are discussed in this review.²

**Torn Meniscus**

In 2014, Mordecai et al wrote an evidence based review exploring the options for managing meniscal tears. Treatment options for meniscal tears fall into three broad categories; nonoperative, meniscectomy or meniscal repair. Selecting the most appropriate treatment for a given patient involves both patient factors and tear characteristics. There is evidence suggesting that degenerative tears in older patients without mechanical symptoms can be effectively treated non-operatively with a structured physical therapy program as a first line. Even if these patients later require meniscectomy they will still achieve similar functional outcomes that if they had initially been treated surgically. Partial meniscectomy is suitable for symptomatic tears not amenable to repair, and can still preserve meniscal function especially when the peripheral meniscal rim is intact. Meniscal repair shows 80% success at 2 years and is more suitable in younger patients with reducible tears that are peripheral and horizontal or longitudinal in nature. However, careful patient selection and repair technique is required with good compliance to post-operative rehabilitation which often consists of bracing and non-weight bearing for 4-6 weeks.³

**Torn Ligaments**

The multiple ligament-injured knee is a complex problem in orthopedic surgery. These injuries may or may not present as acute knee dislocations, and careful assessment of the extremity vascular and neurologic status is essential because of the possibility of arterial and/or venous compromise, and nerve injury. These complex injuries require a systematic approach to evaluation and treatment. Physical examination and imaging studies enable the surgeon to make a correct diagnosis and formulate a treatment plan. Knee stability is improved
postoperatively when evaluated with knee ligament rating scales, arthrometer testing, and stress radiographic analysis. Surgical timing depends on the injured ligaments, vascular status of the extremity, reduction stability, and the overall health of the patient. The use of allograft tissue is preferred because of the strength of these large grafts, and the absence of donor site morbidity.⁴

In 2015, the Multicenter Orthopaedic Outcomes Network (MOON) longitudinal research on ACL reconstruction states meniscal injuries were the most common injury found in both primary and revision ACL procedures. There were 509 patients in the primary ACL revision and 281 patients underwent revision reconstruction. With the high prevalence of meniscal tears associated with ACL tears, meniscal repairs are a necessary component of the ACL reconstruction to help minimize potential for posttraumatic osteoarthritis.⁵

The optimal treatment of posterior cruciate ligament ruptures remains controversial despite numerous recent basic science advances on the topic. The current literature on the anatomy, biomechanics, and clinical outcomes of posterior cruciate ligament reconstruction is reviewed. Recent studies have quantified the anatomic location and biomechanical contribution of each of the 2 posterior cruciate ligament bundles on tunnel placement and knee kinematics during reconstruction. Additional laboratory and cadaveric studies have suggested double-bundle reconstructions of the posterior cruciate ligament may better restore normal knee kinematics than single-bundle reconstructions although clinical outcomes have not revealed such a difference. Tibial inlay posterior cruciate ligament reconstructions (either open or arthroscopic) are preferred by many authors to avoid the "killer turn" and graft laxity with cyclic loading. Posterior cruciate ligament reconstruction improves subjective patient outcomes and return to sport although stability and knee kinematics may not return to normal.⁶

**Popliteal (Baker) Cyst**

Popliteal (Baker) cysts, meniscal cysts, proximal tibiofibular joint cysts, and cruciate ligament ganglion cysts are cystic masses commonly found about the knee. Popliteal cysts form when a bursa swells with synovial fluid, with or without a clear inciting etiology. Presentation ranges from asymptomatic to painful, limited knee motion. Management varies based on symptomatology and etiology. Meniscal cysts form within or adjacent to the menisci. These collections of synovial fluid are thought to develop from translocation of synovial cells or extravasation of synovial fluid into the meniscus through a tear. Joint-line pain and swelling are common symptoms. Management entails partial menisectomy with cyst decompression or excision. Proximal tibiofibular joint cysts are rare, and their etiology remains unclear. Pain and swelling secondary to local tissue invasion is common, and management consists of surgical
excision. Cruciate ligament ganglion cysts have no clear etiology but are associated with mucoid degeneration of the anterior and posterior cruciate ligaments, knee trauma, and synovial translocation into these ligaments. Knee pain and limited range of motion, especially with exercise, are common presenting symptoms. In symptomatic cases, arthroscopic excision is commonly performed.⁷

Synovial Disorders

Collectively, benign synovial disorders are not uncommon, and they may be seen in general orthopedic practices. Symptoms are nonspecific, often delaying diagnosis. In fact, synovial chondromatosis, pigmented villonodular synovitis, synovial hemangioma, and lipoma arborescens often mimic each other as well as other, more common joint disorders in presentation, making diagnosis extremely difficult. It is important to diagnose these disorders correctly in order to provide appropriate treatment and avoid secondary sequelae, such as bone erosion and cartilage degeneration.⁸

Chondromalacia Patellae (Patellar Compression Syndrome)

Patellofemoral pain syndrome has many names including chondromalacia patellae. It is the most common cause of knee pain in teenagers and young adults due to overuse injury in sports like running. It is caused by weakness of the quadriceps muscles resulting in improper knee alignment and pressure on the outer part of the kneecap. The inner and outer retinaculum's become stretched. It may also occur in older adults who have arthritis of the knee. Treatment includes muscle strengthening exercises, patellar taping, PT, and surgery. The need for surgery (lateral retinacular release) is almost eliminated with vastus medialis obliquus strengthening and a taping program.⁹

Osteoarthritis

In 2002, Moseley et al published a randomized placebo-controlled trial (RCT) to evaluate the efficacy of arthroscopy for osteoarthritis (OA) of the knee.¹¹ One hundred eighty patients were randomized to debridement (without abrasion or microfracture), lavage or placebo surgery. Placebo surgery involved a skin incision and simulated debridement without insertion of the arthroscope. Patients and assessors were blinded to treatment group. Neither treatment group
reported less pain or better function than the placebo group at any time point over the 2-year follow-up.

A systematic review produced in 2007 for the Agency for Healthcare Research and Quality (AHRQ) by the Blue Cross and Blue Shield Association Technology Evaluation Center Evidence-based Practice Center noted that generalizability of study results was limited by the lack of detail provided regarding the patient sample, the use of a single surgeon, and enrollment of patients at a single Veterans Affairs Medical Center. The report concluded that “the existing evidence does not definitively show that arthroscopic lavage with or without debridement is no more effective than placebo. However, additional placebo-controlled RCTs showing clinically significant advantage for arthroscopy would be necessary to refute the Moseley results, which show equivalence between placebo and arthroscopy.”

A 2008 Cochrane review of arthroscopic debridement for knee OA assessed 3 RCTs, including the study by Moseley et al and concluded that there is gold-level evidence that arthroscopic debridement has no benefit for undiscriminated OA (mechanical or inflammatory causes). The other 2 studies included in the Cochrane review were of lower methodologic quality and compared arthroscopy with lavage. In one of the reviewed studies Chang et al compared arthroscopy with closed needle lavage and found no significant between-group differences in pain, self-reported and observed functional status, and patient and physician global assessments. This study was small (32 subjects) with only 3 months of follow-up. The second study was a randomized trial of 76 knees, 40 laparoscopic debridement and 36 washout, with mean follow-up time of 4.5 years and 4.3 years, respectively. At 1 year, 32 of the debridement group and 5 of the washout group were pain-free. At 5 years, 19 of the survivors in the debridement group and 3 of the 26 in the washout group were free of pain. This study was noted by the Cochrane review to be at high risk of bias; specifically, outcome assessors were neither independent nor blinded, and pain was measured as success when absent and failure when present.

An updated systematic review of the evidence for joint lavage for OA of the knee was published by the Cochrane Musculoskeletal Group in May 2010 and was based on the literature to April 2009. This review included 7 trials with 567 patients. The Cochrane review did not include the study described below by Kirkley et al, since that trial focused on debridement. The authors concluded that joint lavage does not result in a benefit for patients with knee OA for pain relief or improvement in function.

In September 2008, Kirkley et al published a single-center RCT comparing surgical lavage and/or arthroscopic debridement (without abrasion or microfracture) together with optimized physical and medical therapy, or physical and medical therapy alone. Patients with more than 5 degrees of misalignment were excluded. Both men and women were included. Seven
experienced arthroscopists performed lavage, debridement, or both at their discretion. Between January 1999 and August 2005, 277 patients were assessed for eligibility; 58 were not eligible (most [38%] because of substantial misalignment) and 31 declined participation. Ninety-two patients were randomly assigned to the surgery arm and 86 were assigned to physical and medical therapy alone. Ten withdrew consent (2 in the surgery and 8 in the control group). Six in the surgery group did not undergo surgery. Data from these patients was included in the intent to treat analysis. The primary outcome was total Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score. Secondary outcomes included the Short Form-36 (SF-36) Physical Component Summary score. After 2 years, the mean (SD) WOMAC score for the surgery group was 874 (624) as compared with 897 (583) for the control group (absolute difference [surgery-group score minus control-group score], -23 (605); 95% confidence interval [CI], -208 to 161; P=0.22). The SF-36 Physical Component Summary scores were 37.0 and 37.2, respectively (absolute difference, -0.2; 95% CI: -3.6 to 3.2; P=0.93). Analyses of WOMAC scores at interim visits and other secondary outcomes also failed to show superiority of surgery. Prespecified analyses of subgroups were performed for patients with less severe disease (Kellgren-Lawrence grade 2) at baseline and patients with mechanical symptoms of catching or locking, and no significant difference between treatment groups was found. A post-hoc analysis of patients with more severe radiographic disease (Kellgren-Lawrence grade 3 or 4) also found no benefit of surgery.

In March 2013, Katz et al18 published a multicenter, randomized, controlled trial comparing arthroscopic partial meniscectomy surgery and postoperative physical therapy to a standardized physical therapy regimen (with the option to cross over to surgery) for symptomatic patients with a meniscal tear and concomitant mild-to-moderate osteoarthritis. They enrolled symptomatic patients 45 years of age or older with a meniscal tear as well as osteoarthritis detected on MRI or x-ray. The primary outcome was the difference between the study groups with respect to the change in the score on the physical-function scale of the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) from baseline to 6 months after randomization. They found no significant differences in the magnitude of improvement in functional status and pain after 6 and 12 months between patients assigned to arthroscopic partial meniscectomy with postoperative physical therapy and patients assigned to a standardized physical-therapy regimen. At 6 months the WOMAC score was 20.9 points (95% confidence interval [CI], 17.9 to 23.9) in the surgical group and 18.5 (95% CI: 15.6 to 21.5) in the physical-therapy group (mean difference, 2.4 points; 95% CI: -1.8 to 6.5). At 6 months, 51 active participants in the study who were assigned to physical therapy alone (30%) had undergone surgery, and 9 patients assigned to physical therapy alone (30%) had undergone surgery, and 9 patients assigned to surgery (6%) had not undergone surgery. The results at 12 months were similar to those at 6 months.
In 2015, Thorlund et al\textsuperscript{19} published a systematic review and meta-analysis of benefits and harms on arthroscopic surgery for degenerative knee. The objective was to determine benefits and harms of arthroscopic knee surgery involving partial meniscectomy, debridement, or both for middle aged or older patients with knee pain and degenerative knee disease. The main outcome measures were pain and physical function. RCTs assessing benefit of arthroscopic surgery involving partial meniscectomy, debridement, or both for patients with or without radiographic signs of osteoarthritis were included. The search identified nine trials. The main analysis, combined the primary endpoints of the individual trials from three to 24 months postoperatively, showed a small difference in favor of interventions including arthroscopic surgery compared with control treatments for pain (effect size 0.14, 95% confidence interval 0.03 to 0.26). This difference corresponds to a benefit of 2.4 (95% confidence interval 0.4 to 4.3) mm on a 0100 mm visual analogue scale. When analyzed over time of follow-up, interventions including arthroscopy showed a small benefit of 3-5 mm for pain at three and six months but no later up to 24 months. No significant benefit on physical function was found (effect size 0.09, -0.05 to 0.24). Nine studies reporting on harms were identified. Harms included symptomatic deep venous thrombosis (4.13 (95% confidence interval 1.78 to 9.60) events per 1000 procedures), pulmonary embolism, infection, and death. The authors concluded there was small inconsequential benefit seen from interventions that include arthroscopy for the degenerative knee is limited in time and absent as one to two years after surgery. Knee arthroscopy is associated with harms. Taken together, these findings do not support the practice of arthroscopic surgery for middle aged or older patients with knee pain with or without signs of osteoarthritis.

Practice Guidelines and Position Statements

\textit{Osteoarthritis Research Society International}

The Osteoarthritis Research Society International (OARSI) convened 16 experts from primary care, rheumatology, orthopedics, and evidence-based medicine from 6 countries including the United States to develop consensus recommendations for management of hip and knee OA. OARSI concluded that, “...the roles of joint lavage and arthroscopic debridement are controversial and that, although some studies have demonstrated short-term symptom relief, others suggest that improvement in symptoms could be attributable to a placebo effect.”
American Academy of Orthopaedic Surgeons


Recommendation 11

- We cannot suggest that the practitioner use needle lavage for patients with symptomatic osteoarthritis of the knee.

- Strength of Recommendation: Moderate

- Description: A moderate recommendation means that the benefits exceed the potential harm (or that the potential harm clearly exceeds the benefits in the case of a negative recommendation), but the quality/applicability of the supporting evidence is not as strong.

Recommendation 12

- We cannot recommend performing arthroscopy with lavage and/or debridement in patients with a primary diagnosis of symptomatic osteoarthritis of the knee.

- Strength of Recommendation: Strong

- Description: A strong recommendation means that the quality of the supporting evidence is high. A Harms analysis on this recommendation was not performed.

Recommendation 13

- We are unable to recommend for or against arthroscopic partial meniscectomy in patients with osteoarthritis of the knee with a torn meniscus.

- Strength of Recommendation: Inconclusive

- Description: An inconclusive recommendation means that there is a lack of compelling evidence that has resulted in an unclear balance between benefits and potential harm.

The American Association of Orthopaedic Surgeons’ clinical practice guideline on the management of anterior cruciate ligament injuries (AAOS, 2014) concluded there is limited evidence in patients with combined ACL tears and reparable meniscus tears, but it supports that
the practitioner might repair these meniscus tears when combined with ACL reconstruction because it improves patient outcomes.

Centers for Medicare and Medicaid Services Coverage Position

The Centers for Medicare & Medicaid Services (CMS) determined that the following procedures are not considered reasonable or necessary in treatment of the osteoarthritic knee and are not covered by the Medicare program:

- Arthroscopic lavage used alone for the osteoarthritic knee;
- Arthroscopic debridement for osteoarthritic patients presenting with knee pain only; or,
- Arthroscopic debridement and lavage with or without debridement for patients presenting with severe osteoarthritis. (Severe osteoarthritis is defined in the Outerbridge classification scale, grades III and IV. Grade I is defined as softening or blistering of joint cartilage. Grade II is defined as fragmentation or fissuring in an area <1 cm. Grade III presents clinically with cartilage fragmentation or fissuring in an area >1 cm. Grade IV refers to cartilage erosion down to the bone. Grades III and IV are characteristic of severe osteoarthritis.)

References


25. Reviewed by Board Certified Orthopedic specialists, June 2013.
<table>
<thead>
<tr>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/17/13</td>
<td>Update Related Policies. Add policy 1.03.501.</td>
</tr>
<tr>
<td>02/24/14</td>
<td>Minor update. Clarification made to policy coverage for members under 50 with a history of osteoarthritis which now requires documentation via x-ray; KL4 score criteria as not medically necessary removed from this patient pool for torn meniscus.</td>
</tr>
<tr>
<td>07/14/14</td>
<td>Policy rewrite. Removed the word “adults” from title. Added criteria and rationale for intra-articular joint pathology, osteochondral dissecans, meniscus repair, ligament repair, popliteal cysts, synovectomy debridement, drainage and lavage. References 2-9 added.</td>
</tr>
<tr>
<td>08/11/14</td>
<td>Interim review. Minor update. Re-ordered policy statements and removed information on medial collateral ligament and lateral collateral ligaments.</td>
</tr>
<tr>
<td>09/17/14</td>
<td>Update Related Policies. Add 7.01.550.</td>
</tr>
<tr>
<td>02/10/15</td>
<td>Annual Review. Statements added indicating a meniscus tear may be repaired at the same time as an ACL repair when the ACL meets medically necessity criteria. Removed all policy statements for pediatric and adolescent. Added Adult to title. Reference 21 added.</td>
</tr>
<tr>
<td>03/24/15</td>
<td>Minor update. Add link for ACL with osteoarthritis to the navigational links for policy coverage topics.</td>
</tr>
<tr>
<td>03/30/15</td>
<td>Clarification only: “Over age 50” replaced throughout the policy statement with “age 50 and older”.</td>
</tr>
<tr>
<td>09/08/15</td>
<td>Interim Review. Removed KL requirements for meniscus, ACL and PCL. Removed criteria for under age 50 with osteoarthritis. Combined meniscus tear criteria into one policy statement. Added clarification for symptomatic torn plica. Added bullet in ACL policy statement-physically demanding occupation, or an activity level that includes cutting, jumping, and/or pivoting. Changed recommendation for conservative care for ACL from 8 weeks to 2 weeks. Clarified Chondromalacia Patellae statement by adding (when one of the following are met). Clarified Intra-Articular Joint Pathology statement by adding (when one of the following are met). Added definitions for Anterior drawer test, Apley test, Lachman test, McMurray test, Patellofemoral pain syndrome, Patellar glide test, Positive pivot shift test, patella tilt test. Added References 5, 19. CPT codes 29887 and 29888 added to policy.</td>
</tr>
<tr>
<td>01/12/16</td>
<td>Clarifications only. Added definitions for chondroplasty, microfracture, knee locking, knee giving way. Removed duplicate 8 weeks of conservative care bullet from Meniscal Tear policy statement. Simplified intra-articular joint pathology and removed bullets regarding symptomatic plica; simplified osteochondral defect policy statements.</td>
</tr>
<tr>
<td>Date</td>
<td>Comments</td>
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<tr>
<td>04/22/16</td>
<td>Clarification. Returned one criterion to ACL which was inadvertently left off in recent publications.</td>
</tr>
<tr>
<td>05/19/16</td>
<td>Coding update. Added 29889.</td>
</tr>
<tr>
<td>10/11/16</td>
<td>Policy moved into new format; no change to policy statements. Added Prior Authorization Requirements.</td>
</tr>
<tr>
<td>01/01/17</td>
<td>Annual Review, approved December 13, 2016. Added clarification to symptomatic acute tear in policy statement. Literature reviewed.</td>
</tr>
<tr>
<td>03/01/17</td>
<td>Interim Review, approved February 14, 2017. Clarification made regarding diagnostic imaging in policy section and prior authorization requirements: &quot;Copy of radiologist’s report for diagnostic imaging (MRI, CT, etc.) done within the past 12 months prior to surgery that demonstrates diagnosed defect. Imaging must be performed and read by an independent radiologist. If there are discrepancies in the interpretation of the imaging, the radiologist’s report will supersede.&quot; This is consistent with other policies.</td>
</tr>
<tr>
<td>12/21/17</td>
<td>Coding update; removed CPT 29887.</td>
</tr>
</tbody>
</table>

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PO Box 91102, Seattle, WA 98111
Toll free 855-332-4535, Fax 425-918-5592. TTY 800-842-5357
Email AppealsDepartmentInquiries@Premera.com

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U.S. Department of Health and Human Services
200 Independence Avenue SW, Room 509F, HHH Building
Washington, D.C. 20201, 1-800-368-1019, 800-537-7697 (TDD)

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العلاقة التي تربط الحصول عليه من خلال Premera Blue Cross
في هذا الإشعار، وتم نجاح إجراءات تأهيل تأهيلية إلى تأهيل تأهيلية للكمامة على تأهيل تأهيلية المثلى والمثلى في دفع الكبيرة. يمكن أن يكون الحصول على هذه المعلومات والمثلى يمكن أن يكون الكبيرة. أصل

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Tsab ntawv tsjaj xo no muaj cov ntsibh lab lus tseem ceeb. Tej zaum tsab ntawv tsjaj xo no muaj cov tsibh lab lus tseem lab bong koy daim ntawv thov koy pav los yog koy qhov koy pav cuam los ntawm Premera Blue Cross. Tej zaum muaj cov hnb tseem ceeb uas rau havu daim ntawv no. Tej zaum koy juj yuav tau uu qee yam uas peb koy uas bis pib dhuav cov caj njog uas teev tsq rau havu daim ntawv no mas koy nqj yuav tau baiz koy pav cuam kho mob los yog koy pav koy pem tej qj ki kho mob ntawv. Koy muaj cai kom lawv mbob cov ntsibh lab no uas tau mbab sau uu koy hom lub pib dawv rau koy. Hu rau 800-722-1471 (TTY: 800-842-5357).

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