

# CODING ARTHROSCOPIC KNEE PROCEDURES

## Knee Anatomy:

The medial compartment includes:

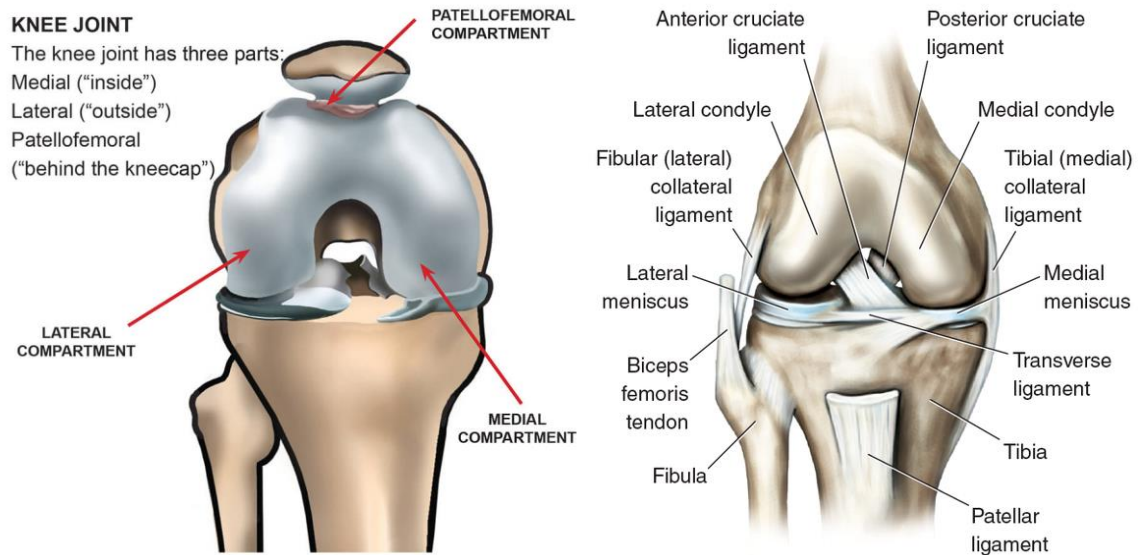
- Medial Femoral condyle
- Medial tibial plateau
- Medial meniscus

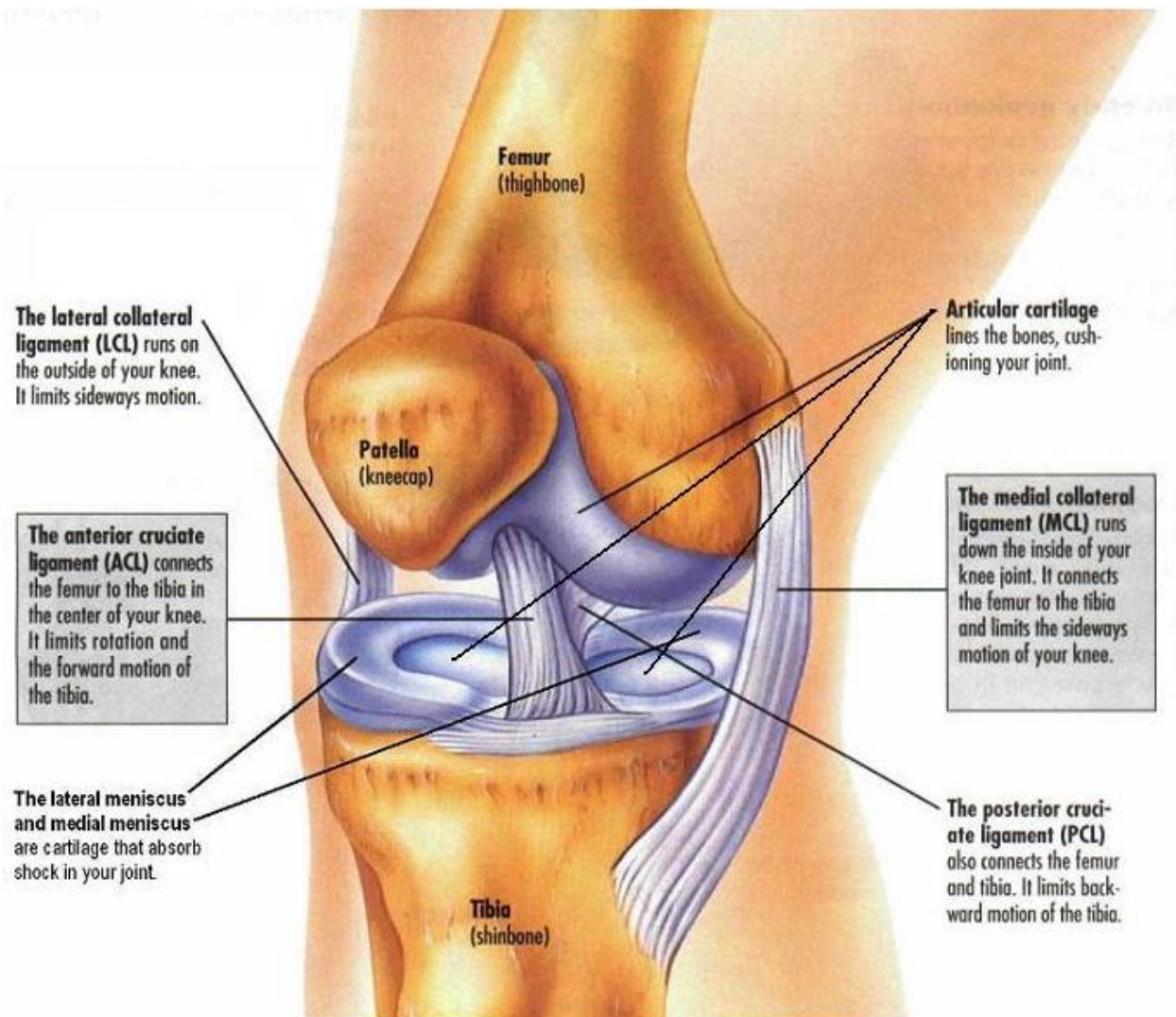
The lateral compartment includes:

- Lateral Femoral condyle
- Lateral tibial plateau
- Lateral meniscus

The Patellofemoral compartment includes:

- Patella
- Patellofemoral joint
- Intercondylar notch of the femur
- Suprapatellar pouch
- Trochlea





## Cartilage of the Knee Joint

Slippery and flexible, hyaline (articular) cartilage within the knee joint allows, has less friction than two pieces of glass placed together. This allows the joint to move with minimal friction in a healthy knee. There are two primary types of cartilage in the knee:

- **Articular (Hyaline) cartilage.** This cartilage covers the bones where they meet at the knee joint. The end of the femur (condyles) and the back of the patella (knee cap). It is simultaneously smooth and strong, allowing bones to move over one another with minimal friction.
- **Meniscus (Fibrocartilage).** The menisci are two C-shaped cartilaginous structures within the knee. The medial (inside) and lateral (outer) menisci act as cushions for weight bearing activities, decreasing the effect of impact between the femur and tibia.

The articular cartilage and menisci are integral to the proper function of the knee joint. They can be injured in an acutely or gradually through repetitive stresses. The loss of cartilage in the knee is termed arthritis. This can be both

inflammatory, as in rheumatoid arthritis, or primary, as in the case of osteoarthritis.

## **Tendons, Ligaments, and Other Soft Tissues of the Knee Joint**

The knee joint relies on a variety of ligaments, tendons, and soft tissue structures to maintain flexibility, stability, and strength.

**Ligaments** are ropey, fibrous bands of tissue that connect bones to other bones.

- **The Anterior Cruciate Ligament (ACL).** The ACL connects the tibia to the femur and functions to prevent the tibia from sliding forward on the femur. The ACL is commonly injured in sporting activities and rarely injured in isolation.
- **The Posterior Cruciate Ligament (PCL).** The PCL also connects the tibia to the femur. It functions to prevent the tibia from sliding backward on the femur. The PCL works with the ACL for stabilization of the knee. It is commonly injured in hyperextension type knee moments.
- **The Lateral Collateral Ligament (LCL).** The LCL, which is also known as the fibular collateral ligament, is located on the outside (lateral side) of the knee. It connects the outside, bottom edge of the femur to the outside, top edge of the fibula. The LCL helps stabilize the knee joint by limiting outward (varus) force across the knee.
- **The Medial Collateral Ligament (MCL).** The MCL is located on the inside (medial side) of the knee, connecting the inside, bottom edge of the femur with the inside, top edge of the tibia. The MCL helps to stabilize the knee by limiting inward (valgus) force across the knee. The MCL works with the LCL to prevent unwanted side-to-side motion. The MCL is the most commonly injured knee ligament.

**Tendons** are flexible tissues that attach muscle to bone.

- **The hamstring tendons.** There are three hamstring tendons that cross the knee joint on the back of the knee. Two are on the inside (medial) part of the knee attaching to the shin bone (Semimembranosus and Semitendinosus) and one is on the outside (lateral) part of the knee, attaching to the fibula (Biceps femoris).
- **The quadriceps tendon.** This tendon is composed of contributions from the four quadriceps muscles (the vastus lateralis, vastus intermedius, vastus medialis, and rectus femoris). It attaches the powerful quadriceps muscles to the top part of the patella.
- **The patellar tendon.** This tendon (also called patellar ligament) attaches the bottom part of the patella to the top part of the tibia.
- **A synovial membrane.** All of the joints in the body are surrounded by a balloon that holds the joint fluid in. These balloons hold the joint fluid (synovial fluid) in the joint. This fluid is integral to the health of the joint, providing lubrication and delivering nutrients.

## **Arthroscopy:**

<https://www.youtube.com/watch?v=q6-ZE6QWrKA>

Knee arthroscopy allows the physician to visualize the joint space of the knee using a fiberoptic endoscope. (An endoscope is basically a long tube with a lens at each end. Endoscopes used to visualize joint spaces are called arthroscopes).

This Technology also allows the physician to perform arthroscopic surgery using Instruments inserted through small incisions, instead of having to perform an open procedure.

Arthroscopic knee surgery usually involved at least two incisions. The first incision is made on the lateral side of the patellar tendon-incision-this is where the arthroscope is inserted. Additional incisions are made, one on the medial side of the patellar tendon and other as needed, for the insertion of surgical instruments. These incisions are called portals. Saline is infused into the joint space to expand the cavity for easier viewing and instrumentation. The surgeon thoroughly examines the joint first; this may require repositioning the leg in order to access all the recesses of the joint cavity. After the diagnostic examination, any problems noted may be corrected arthroscopically.

### **CPT® Assistant August 2001; page 5:**

“When both a diagnostic and surgical arthroscopy is performed, the diagnostic arthroscopy is an inclusive component of the surgical arthroscopy and would not be reported separately.”

“Arthroscopic procedures in Separate Compartments: When both a diagnostic and surgical arthroscopy is performed, the diagnostic arthroscopy is an inclusive component of the surgical arthroscopy and would not be reported separately.”

### **CPT® Assistant April 2005; page 14:**

“From a CPT® coding perspective, if debridement or shaving of articular cartilage and meniscectomy are performed in the same compartment of the knee, then only code 29881, Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving), should be reported. However, if debridement or shaving of articular cartilage is performed in one compartment of the knee and a meniscectomy is performed in a different compartment of the knee, then codes 29877, Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty), and 29881 should be reported.”

## **HCPCS Code G0289**

An important HCPCS code is G0289, Arthroscopy, knee, surgical, for removal of loose body, debridement/shaving of articular cartilage (chondroplasty) at the time of other surgical knee arthroscopy in a different compartment of the same knee. This code is used for Medicare to report the procedure in that description, when performed in a separate compartment of the knee during the same operative session. It is not appropriate to use code 29877 even with a modifier.

HCPCS code G0289 may be reported in addition to CPT® code 29880, Arthroscopy, knee, surgical; with meniscectomy (media AND lateral, including any meniscal shaving) or CPT® code 29881, Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving) if performed in a separate compartment.

**Example:**

29888 – ACL Repair

G0289 - Arthroscopy, knee, surgical, for removal of loose body, debridement/shaving of articular cartilage (chondroplasty) at the time of other surgical knee arthroscopy in a different compartment of the same knee

**Note: G0289 is used instead of 29877 because it is in a separate compartment of the same knee.**

**Example:**

An arthroscopy with a medial meniscectomy and shaving of the articular cartilage in the lateral compartment is performed on the left knee, commercial carrier.

29881-LT – identifies the excision of the meniscus

29877-LT-59 – identifies debridement/shaving of the cartilage

An arthroscopy with a medial meniscectomy and shaving of the articular cartilage in the lateral compartment is performed on the left knee, Medicare patient.

29881-LT – identifies the excision of the meniscus

G0289-LT– identifies debridement/shaving of the cartilage

When appropriate use the -59 modifier with the second procedure. This will let the payer know that the procedures listed were performed in separate compartments of the knee.

An arthroscopy for medial meniscal repair with at Patellofemoral chondroplasty

29882 – Arthroscopic meniscal repair

29887-59 – arthroscopic Patellofemoral chondroplasty

If an arthroscopic procedure is performed at one site and an open procedure is performed at a different site, a modifier should be used to indicate this (-59, RT, LT, etc.). When a procedure is started arthroscopically and converted to an open procedure, only the most comprehensive service is billed. Exception for this rule, if the physician performs a therapeutic procedure through the scope but had planned to do another procedure open, then both procedures may be billed pending verification with the appropriate guidelines.

**Example:**

29876 – Arthroscopy, medical compartment and suprapatellar pouch synovectomy

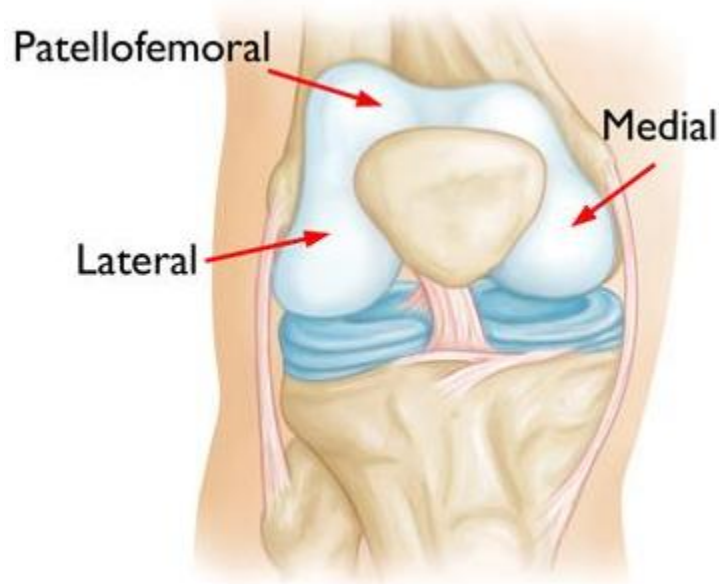
G0289 - Arthroscopy, knee, surgical, for removal of loose body, debridement/shaving of articular cartilage (chondroplasty) at the time of other surgical knee arthroscopy in a different compartment of the same knee

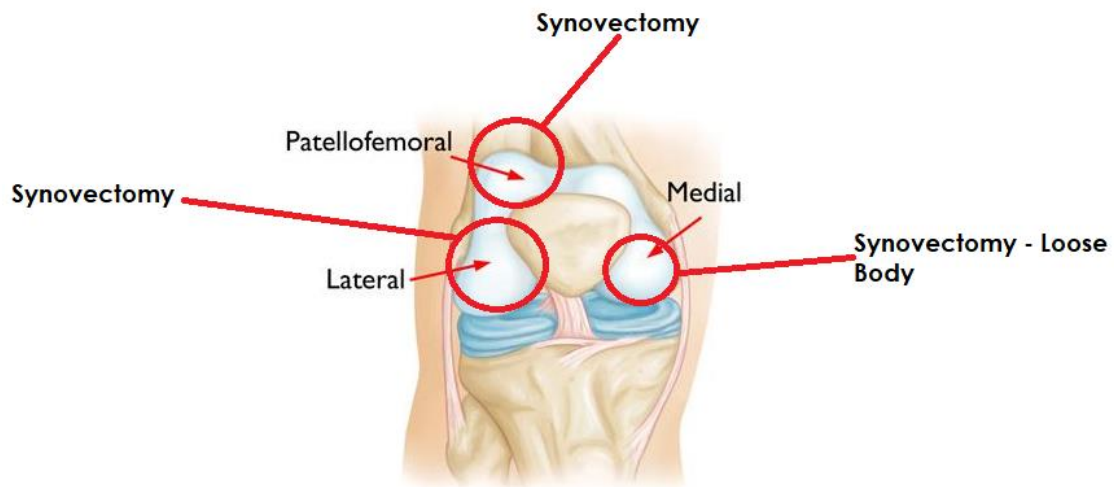
**Note: G0289 is used instead of 29874 because it is in a separate compartment.**

**Scenario 1**

**Procedures Performed:**

1. Arthroscopic synovectomy in all three compartments of the left knee
2. Loose body removal in the medial compartment of the left knee





**CPT Codes:**

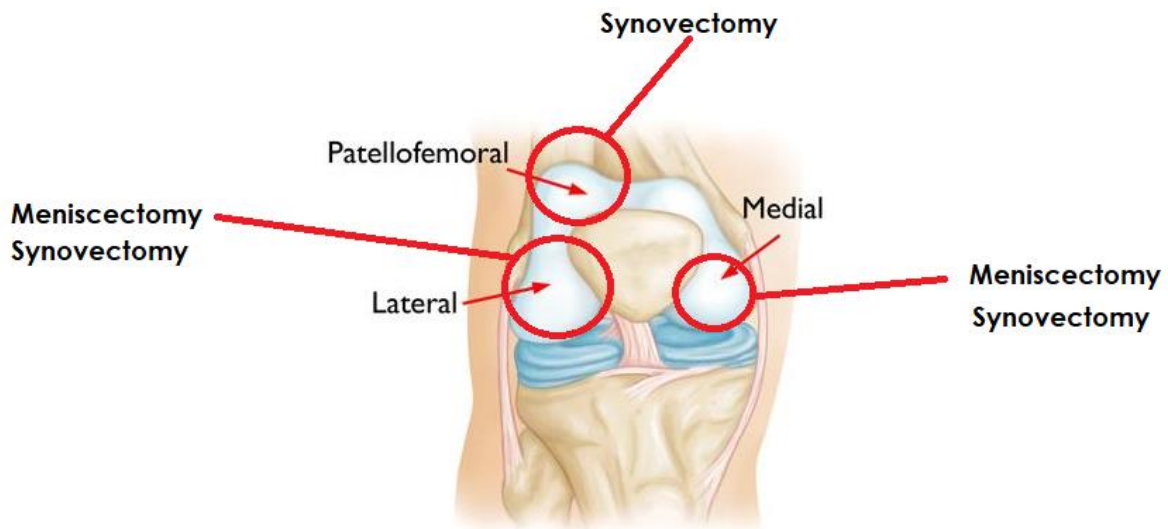
**29876 Arthroscopic extensive synovectomy**

29876 for the extensive synovectomy is the only code reported. G0289 for the loose body is NOT CODED because the synovectomy was done in the same compartment as the loose body and therefore it was not in a separate compartment and is not to be coded.

**Scenario 2**

**Procedures performed:**

1. Arthroscopic medial and lateral meniscectomy
2. Arthroscopic synovectomy in all three compartments
3. Chondroplasty in the medial compartment



29880 Arthroscopy medial **and** lateral meniscectomy

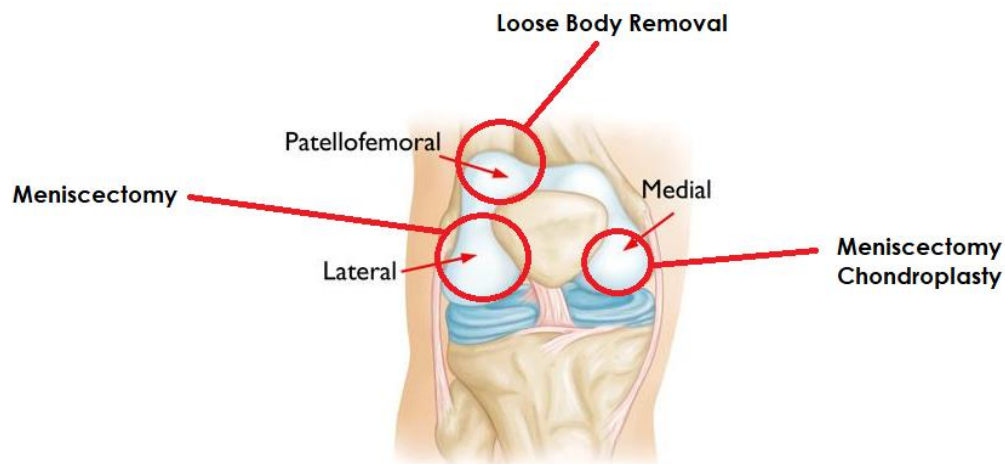
- A Chondroplasty is **NEVER** coded with a meniscectomy regardless of the compartment. The meniscectomy includes the synovectomy in the code description.
- The synovectomy is global to the 29880 and should only be reported if done in two different departments from the meniscectomy. In this case, the meniscectomy was performed in 2 out of the 3 compartments so that would be possible because there are only 3 compartments.

**NOTE:** What you need to know is that CPT codes 29880 and 29876 are global and should not be unbundled.

### Scenario 3

#### Procedures Performed:

1. Arthroscopic medial and lateral meniscectomy
2. Arthroscopic excision of loose body from the notch in the Patellofemoral compartment
3. Arthroscopic Chondroplasty medial compartment



#### CPT Codes:

29880 Arthroscopy medial and lateral meniscectomy

G0289 for the Arthroscopic removal of a loose body in a separate compartment

29880 is coded for the medial AND lateral meniscectomy

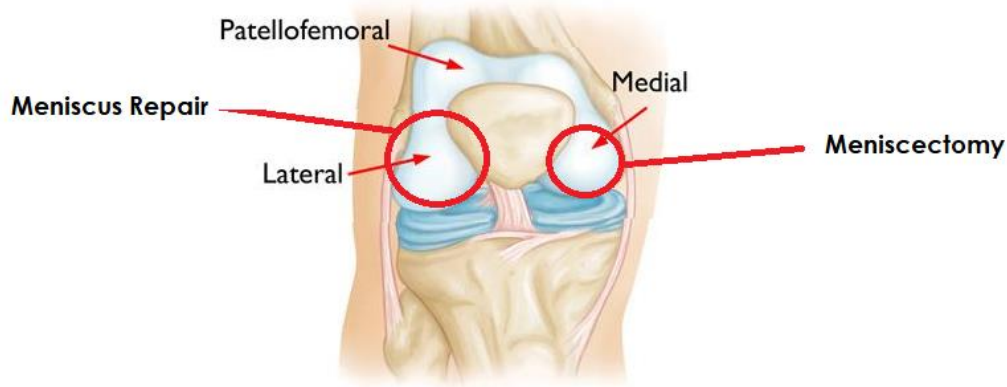
Since the loose body removal was done in a separate compartment (patellofemoral), the G0289 is coded.

### Scenario 4

#### Procedures:

1. Medial meniscectomy
2. Lateral meniscus repair





Code	Description
<a href="#">29882</a>	<p>Arthroscopy, knee, surgical; with meniscus repair (medial or lateral)</p> <p>Code 29882 is a column 2 code for 29881 , but a modifier is allowed in order to differentiate between the services provided.</p> <p>*Use modifier with code 29882</p> <p><b>CCI edit Rule:</b> <b>Mutually exclusive procedures</b></p> <p><b>Note*:</b> Always use modifier (if allowable) with column 2 code.</p> <p>The current NCCI-associated modifiers are: E1, E2, E3, E4, FA, F1, F2, F3, F4, F5, F6, F7, F8, F9, LC, LD, LM, RC, RI, LT, RT, TA, T1, T2, T3, T4, T5, T6, T7, T8, T9, XE, XP, XS, XU, 24, 25, 27, 57, 58, 59, 78, 79, and 91. Read about modifiers for <a href="#">CPT</a> and <a href="#">HCPCS</a> codes</p> <p><b>CPT® Assistant</b></p> <p><b>Lay Terms</b></p> <p><b>My Specialty Coding Alert Related Articles</b></p>
<a href="#">29881</a>	<p>Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), s ...</p> <p><b>No CCI edit; Before reporting code, check Medicaid and payer policies.</b></p>

29882 Arthroscopy, knee, surgical; with meniscus repair (medial or lateral)

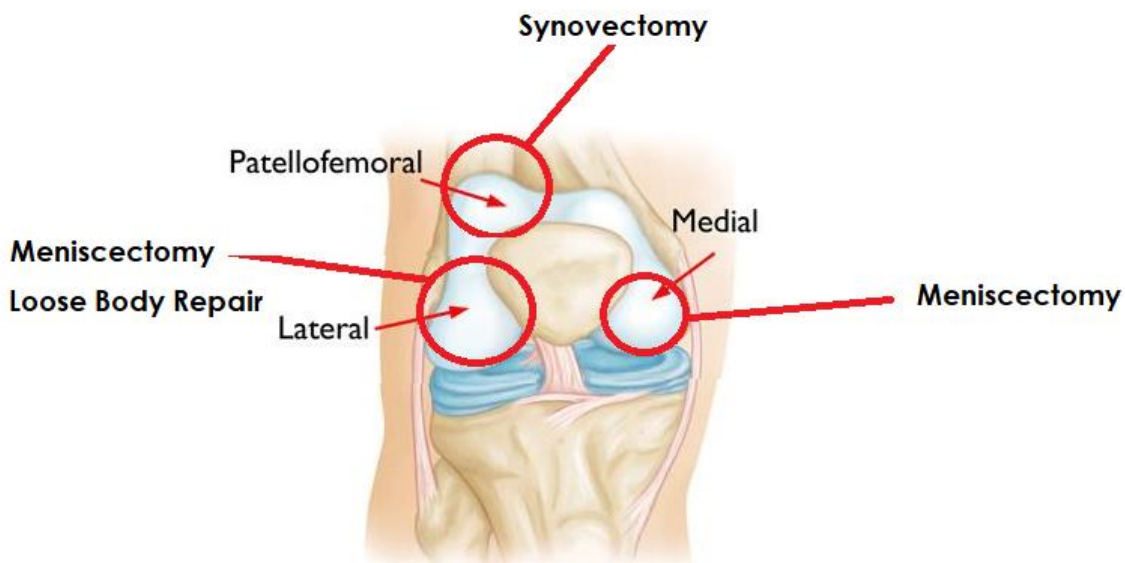
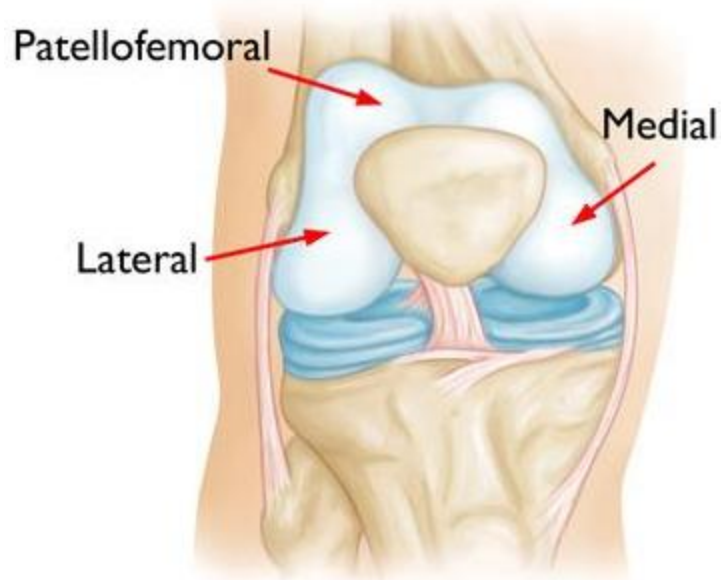
29881-59 – Arthroscopy, knee, surgical; with meniscectomy (medial or lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty)

Modifier should be utilized to report the 29881 with 29882.

## Scenario 5

### Procedures:

1. Medial and lateral meniscectomy
2. Synovectomy in the patellofemoral compartment
3. Loose body removal in the lateral compartment



29875 Arthroscopy, knee, surgical; synovectomy, limited (eg, plica or shelf resection) (separate procedure)

- Limited synovectomy is defined in CPT as a “separate procedure.” As such, do not report 29875 with another arthroscopic procedure in the same knee. Report it when it’s the only arthroscopic procedure performed on that knee. Comparts are not recognized for the purpose of reporting this CPT code.

Codes to report are:

- 29880 is reported because it is the primary procedure.
- 29874 is not coded because it is global to the primary procedure and in the same compartment as was the primary procedure.
- 29875 is not coded because it is global to the primary procedure.

## Common Arthroscopic Knee Procedures:

29850 - Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; without internal or external fixation (includes arthroscopy)

29851 - Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; with internal or external fixation (includes arthroscopy)

29855 - Arthroscopically aided treatment of tibial fracture, proximal (plateau); unicondylar, includes internal fixation, when performed (includes arthroscopy)

29856 - Arthroscopically aided treatment of tibial fracture, proximal (plateau); bicondylar, includes internal fixation, when performed (includes arthroscopy)

29866 - Arthroscopy, knee, surgical; osteochondral autograft(s) (e.g., mosaicplasty) (includes harvesting of the autograft[s])

29867 - Arthroscopy, knee, surgical; osteochondral allograft (e.g., mosaicplasty)

29868 - Arthroscopy, knee, surgical; meniscal transplantation (includes arthrotomy for meniscal insertion), medial or lateral

29870 - Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)

**Note: Don't use the diagnostic code when a surgical knee arthroscopy is performed.**

29873 - Arthroscopy, knee, surgical; with lateral release

29874 - Arthroscopy, knee, surgical; for removal of loose body or foreign body (e.g., osteochondritis dissecans fragmentation, chondral fragmentation)

29875 - Arthroscopy, knee, surgical; synovectomy, limited (e.g., plica or shelf resection) (separate procedure)

**Note: Involves resection of synovium and/or resection of plica from one compartment.**

29876 - Arthroscopy, knee, surgical; synovectomy, major, two or more compartments (e.g., medial or lateral)

**Note: Involves resection of synovium and/or plica from two or more compartment. The code 29876 can be assigned in addition to 29881**

29877 - Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)

29879 - Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture

**Note: This includes chondroplasty where necessary. This procedure promotes cartilage regeneration by creating access to bone and/or drilling holes to create microfractures. The code 29879 can be assigned in addition to 29881.**

29880 - Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving)

29881 - Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving)

29882 - Arthroscopy, knee, surgical; with meniscus repair (medial OR lateral)

29883 - Arthroscopy, knee, surgical; with meniscus repair (medial AND lateral)

**Note: Sometimes a physician may indicate he did a meniscus repair when he really meant a meniscectomy. The operative report may include some description of sutures or “arrows” into the meniscus if a repair was performed.**

29884 - Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)

**Note: This code is commonly assigned for debridement of “Cyclops lesion” which is localized arthrofibrosis which generally develops after ACL reconstruction.**

29888 - Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction

29889 - Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction

An Arthroscopically-aided ACL repair/reconstruction includes the following:

- Insertion of synthetic bone substitute bone matrix/methylmethacrylate
- Internal fixation of graft
- Notchplasty
- Insertion or placement of surgical drain
- Closure of wound and repair of tissues for initial surgical exposure. Only complicated wound closures and those requiring flaps or grafts may be separately billed
- Harvesting of the graft (fascia, tendon or bone) even if performed through a separate incision

## Unlisted Procedure, Arthroscopy

There are some arthroscopic procedures that do not have specific CPT® code assignments. In those cases, the unlisted procedure code would be assigned. Here are some examples of procedures coded to 29999.

- Meniscus Trephination: Drilling multiple holes in the torn part of the meniscus and/or joint capsule to promote healing.
- Anterior cruciate ligament debridement: Debridement of fraying or tears of the ligament
- Notchplasty: Used to widen the anterior portion and recess of the roof of intercondylar notch typically involving removal of 3-5 mm of bone from the lateral femoral condyle.
- Bursectomy: Removal of the bursa for pathology not associated with another procedure. Bursectomy done for better visualization of the knee joint during arthroscopic surgery is consider inclusive of the procedure.

### Video Links for Arthroscopic Knee Procedures

**Meniscectomy** - <https://www.youtube.com/watch?v=vdNk3JTCrik>

**ACL Reconstruction** - <https://www.youtube.com/watch?v=Xsq0sQp6DwU>

### Other Information Video on Knee Problems

**Knee Pain & Meniscus Tears** - <https://www.youtube.com/watch?v=QviesmjU8QQ>  
**Chondroplasty, Microfracture, Osteoarticular Allograft, Autologous Chondrocyte Implantation (ACI), Denovo NT** -

<https://www.youtube.com/watch?v=CxhFhidWn6w;>

[https://www.youtube.com/watch?v=t\\_JEk66AddA](https://www.youtube.com/watch?v=t_JEk66AddA)

<https://www.youtube.com/watch?v=zosUL2-1FfE>

**Osteochondral Autologous Transplantation Surgery (OATS)** -

[https://www.youtube.com/watch?v=Q07py\\_W0XH4](https://www.youtube.com/watch?v=Q07py_W0XH4)

**Mosaicoplasty** - <https://www.youtube.com/watch?v=VbB-IDbAfC0>

**Arthroscopically-Aided Resurfacing of the Knee** -

<https://www.youtube.com/watch?v=CqjhGMZVkoM>