




# YPO\_Video storyboard\_Patellofemoral Pain Syndrome

Voice Over text	Images/videos	Additional Comments
<p>Your Practice Online presents <b>Patellofemoral Pain Syndrome</b>.</p>	<p>Graphical text drops in with image on the background</p>  <p>Patellofemoral pain syndrome  <a href="http://www.summitmedicalgroup.com/library/sports_health/patellofemoral_pain_syndrome/">http://www.summitmedicalgroup.com/library/sports_health/patellofemoral_pain_syndrome/</a></p>	<p><b>Suggest for</b></p> <ul style="list-style-type: none"> <li>• <b>Text Display</b> (If text needs to shown on video)</li> <li>• <b>Label in the images/videos</b> (If some body part/implant/surgical instrument needs to be labelled)</li> <li>• <b>Highlight key feature</b> (Such as some muscle/nerve/body part need to be highlighted in the process of surgery)</li> </ul>
<p>Patellofemoral pain syndrome, also called runner's knee, refers to pain in the front of the knee, around the patella. The patella, also called kneecap, is a small flat triangular bone located at the front of the knee joint. It is a sesamoid bone embedded in a tendon that connects the muscles of the thigh to the shin bone (tibia).The function of the patella is to protect the front part of the knee.</p> <p>As the name suggests, runner's knee is a common complaint among runners, jumpers, and other athletes such as skiers, cyclists, and soccer players.</p> <p><a href="http://familydoctor.org/online/famdocen/home/healthy/physical/injuries/479.html">http://familydoctor.org/online/famdocen/home/healthy/physical/injuries/479.html</a></p> <p><a href="http://orthoinfo.aaos.org/topic.cfm?topic=a00382">http://orthoinfo.aaos.org/topic.cfm?topic=a00382</a></p> <p><a href="http://www.merriam-">http://www.merriam-</a></p>	 <p>Runner's knee  <a href="http://saveyourself.ca/articles/diagnose-runners-knee.php">http://saveyourself.ca/articles/diagnose-runners-knee.php</a></p>  <p><b>Image1</b> :Patella  <a href="http://www.empowher.com/media/reference/patella-fracture">http://www.empowher.com/media/reference/patella-fracture</a> )</p>	<p><b>Text display:</b> Patella (along with image 1)</p> <p><b>Image 1:</b> Label patella and tibia</p>

# YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

[webster.com/dictionary/patella](http://www.webster.com/dictionary/patella)

<http://www.medterms.com/script/main/art.asp?articlekey=4795>

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>



Runners(File #: 17790531)



Jumpers(File #: 16451910)



Skiers(File #: 17397040)



Cyclists(File #: 17057322)



Soccer players(File #: 15177903)

## Causes

Patellofemoral pain may occur from poor alignment of the kneecap, complete or partial dislocation, overuse, tight or weak thigh muscles, flat feet, or direct trauma to the knee. Patellofemoral pain often comes from strained tendons and irritation or softening of the cartilage that lines the underside of the kneecap. Pain in the knee may be referred from other parts of the body, such as the back or hip.



Poor alignment of the kneecap (<http://www.almuderis.com.au/common-operations/patella-malalignment> )



# YPO\_Video storyboard\_ Patellofemoral Pain Syndrome

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>

Complete or partial dislocation([http://www.conquestchronicles.com/pages/the\\_dislocated\\_patella](http://www.conquestchronicles.com/pages/the_dislocated_patella) )



Overuse(<http://www.coreperformance.com/knowledge/injury-pain/jumpers-knee.html> )



Weak thigh muscles (<http://fitforcarnival.wordpress.com/category/exercise/> )



Flat feet (<http://www.footminders.com/flatt-feet-fallen-arches-over-pronation-orthotics-treatment.html> )



Trauma (File #: 15468424)

## Symptoms

The most common symptom of patellofemoral

## YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

pain syndrome is a dull aching pain underneath the kneecap especially when walking up or down stairs, squatting, kneeling down, and sitting with your knees bent for long period of time.

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>



Pain([http://fooyoh.com/menknowpause\\_health\\_conditions/5011](http://fooyoh.com/menknowpause_health_conditions/5011))



Squatting(File #: 6918557)



Kneeling down(File #: 18246970)



Sitting with knees

(<http://cnx.org/content/m22745/latest/>)

## YPO\_Video storyboard\_Patellofemoral Pain Syndrome

### Diagnosis

To diagnose patellofemoral pain your doctor will ask about your symptoms, medical history, sports participation, and activities that aggravate your knee pain. Your doctor will perform a physical examination of your knee. Diagnostic imaging tests such as X-rays, MRIs, and CT scans, and blood tests may be ordered to rule out damage to the structure of the knee and the tissues attached to it.

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>



Symptoms(File #: 16301412)



Medical history(File #: 15662030)



Physical examination(File #: 18292828)



X-rays(File #: 16004426)



MRI(File #: 3865261)



CT scan(File #: 15911813)

# YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

	 <p>Blood tests(File #: 18564330)</p>	
<p><b>Treatment</b></p> <p>Treatment depends on the particular cause of the pain and the initial treatment is usually non-surgical.</p> <p>The first treatment step is to avoid activities such as running or jumping that causes knee pain. Non surgical treatment consists of rest, ice, compression, and elevation (RICE protocol); all assist in controlling pain and swelling. Non steroidal anti-inflammatory medications may be prescribed to reduce pain.</p> <p><b>Physical therapy:</b> Your physical therapist will prepare and instruct you on an exercise program to improve flexibility and strength of the thigh muscles. Cross-training exercises to stretch the lower extremities may also be recommended tor.</p> <p><b>Knee taping:</b> Adhesive tape is applied over the patella, to alter the kneecap alignment and movement. Taping of the patella may help to reduce pain.</p> <p><b>Knee brace:</b> A special brace for the knee may be used during sports participation to help reduce pain.</p> <p><b>Orthotics:</b> Special shoe inserts may be prescribed for those with flat feet to also help relieve the pain.</p>	<p><p>Running(File #: 17790531)</p><p><p>Jumping(File #: 16451910)</p><p><p>Rest(File #: 18470149)</p><p><p>Ice(File #: 2439340)</p><p><p>Compression(File #: 4617824)</p></p></p></p></p></p>	

## YPO\_Video storyboard\_Patellofemoral Pain Syndrome

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>

<http://www.orthosports.info/multimedia/patellofemoral-ps/Patello Pain Syndrome.swf>

<http://www.patient.co.uk/health/Patellofemoral-Pain.htm>



Elevation

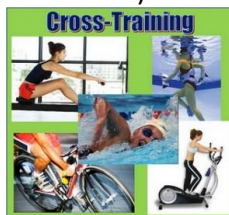
(<http://www.orthosports.info/multimedia/pfemoral-Instability/Patello Instability.swf>)



Medications(File #: 15566280)



Physical therapy(File #: 12265088)



Cross-training exercises(<http://thesweetliferunner.blogspot.com/2011/07/my-sweet-two-cents-on-cross-training.html> )



Knee taping  
(<http://sportsmedinfo.net/kinesi>)

## YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

[ology-taping/222-kinesio-taping-runners-knee](#) )



Knee brace  
(File #: 11131424)



Orthotics(<http://www.science26.co.uk/treatments-knee.php> )

### Surgical treatment

In cases where conservative treatment measure do not alleviate the pain, surgery may be recommended which includes arthroscopy and realignment.


Arthroscopy surgery is performed under sterile conditions in the operating room under spinal or general anaesthesia. The surgeon will make two small cuts around your knee. The arthroscope, a narrow tube with a tiny camera on the end, is inserted through one of the incisions to view the knee joint. The camera attached to the arthroscope displays the image of the joint on the monitor. A sterile solution will be pumped into your knee in order to stretch the knee and provide a clear view and room for the surgeon to work. With the images from the arthroscope as a guide the surgeon can look for any anomalies. Tiny surgical instruments are inserted through the other incisions for your surgeon to remove the

(**Creative directions:** refer this link for the procedure

<http://www.orthosports.info/multimedia/patellofemoral-ps/Patello Pain Syndrome.swf>)



## YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

<p>fragments of damaged kneecap cartilage.</p> <p>Realignment: If your patella is misaligned, a realignment procedure is performed. Realignment moves the kneecap back to its original alignment, thus reducing the abnormal pressure on cartilage and supporting structures around the front of the knee. A longer incision is made over the front of the knee to accomplish this. Depending on your situation, a lateral retinacular release may be performed. In this procedure, the tight ligaments on the outer side of the knee are released, thus allowing the patella to sit properly in the femoral groove. Your surgeon may also tighten the tendons on the inside, or medial side of the knee to realign the quadriceps.</p> <p>In cases where the malalignment is severe, a procedure called a tibial tubercle transfer or TTT will be performed. In this procedure a section of bone where the patellar tendon attaches on the tibia is removed. This bony section is then shifted and properly realigned with the patella and reattached to the tibia using screws. Once the malalignment is repaired and confirmed with arthroscopic evaluation, the incisions are closed with sutures.</p> <p><a href="http://www.orthosports.info/multimedia/patellofemoral-ps/Patello Pain Syndrome.swf">http://www.orthosports.info/multimedia/patellofemoral-ps/Patello Pain Syndrome.swf</a></p>		
<p><b>Postoperative care</b></p> <p>Your doctor will recommend pain medications to relieve pain. To help reduce the swelling elevate the leg and apply ice packs over the knee as instructed. Crutches may be used for the first few weeks to prevent weight bearing on the knee. A knee immobilizer may be used</p>	 <p>Pain Medications(File #:</p>	

## YPO\_Video storyboard\_Patellofemoral Pain Syndrome

to stabilize the knee. You will be instructed about the activities to avoid and exercises to be performed for a faster recovery. A rehabilitation program may also be ordered for a successful recovery.

<http://www.orthosports.info/multimedia/patellofemoral-ps/Patello Pain Syndrome.swf>

15566280)



Elevate the leg

(<http://www.orthosports.info/multimedia/pfemoral-Instability/Patello Instability.swf>)



Ice packs




(<http://www.painreliever.com/employ-ability-ankle-ice-packs-instrucold.html> )



Crutches(File #: 2213167)

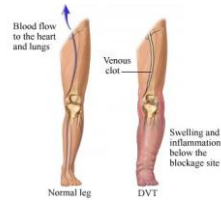


# YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome

	<p>Knee immobilizers  <a href="http://orthotape.com/Knee_braces_support.asp"> (http://orthotape.com/Knee_braces_support.asp )</a></p>  <p>Rehabilitation program  <a href="http://www.ehow.com/how_2056235_start-rehabilitation-program-after-knee.html"> (http://www.ehow.com/how_2056235_start-rehabilitation-program-after-knee.html )</a></p>	
<p><b>Risks and complications</b></p> <p>Possible risks and complications associated with knee surgery include:</p> <ul style="list-style-type: none"> <li>• Hemarthrosis (bleeding inside a joint)</li> <li>• Infection</li> <li>• Blood clots (Deep vein thrombosis)</li> <li>• Nerve and blood vessel damage</li> <li>• Ligament injuries</li> <li>• Arthrofibrosis (thick fibrous material around the joint)</li> </ul> <p><a href="http://www.orthosports.info/multimedia/patellofemoral-ps/Patello_Pain_Syndrome.swf">http://www.orthosports.info/multimedia/patellofemoral-ps/Patello_Pain_Syndrome.swf</a></p>	<p>Bleeding into joint capsule</p>  <p>Hemarthrosis  <a href="http://www.rehab.ca/Injuries-Conditions/Knee/Knee-Issues/Anterior-Cruciate-Ligament-Injuries/a~338/article.html"> (http://www.rehab.ca/Injuries-Conditions/Knee/Knee-Issues/Anterior-Cruciate-Ligament-Injuries/a~338/article.html)</a></p>  <p>Infection(<a href="http://www.razor-gator.com/MRSA_methicillin_resi">http://www.razor-gator.com/MRSA_methicillin_resi</a>)</p>	

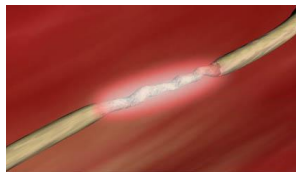
## YPO\_Video storyboard\_Patellofemoral Pain Syndrome

[stant staphalococcus aureus infection and disposable razors blades.htm](#) )



Blood clots(Deep vein thrombosis)

<http://heartstrong.wordpress.com/2010/03/30/march-is-dvt-awareness-month-are-you-at-risk/>



Nerve and blood vessel damage

(<http://medtips.in/nerve-damage/> )



Ligament injuries

([http://www.indianarthroscopy.com/what\\_is\\_wrong\\_with\\_your\\_knee.html](http://www.indianarthroscopy.com/what_is_wrong_with_your_knee.html) )

# YPO\_Video storyboard\_Patellofemoral Pain Syndrome



Arthrofibrosis

(<http://www.jaaos.org/content/15/11/682/F5.expansion> )

## Prevention

The following modifications can help to lower your risk for developing patellofemoral pain syndrome:

- If you are overweight, you may need to lose weight to avoid overstressing your knees
- Gradually increase the intensity of your workouts
- If you have flat feet or other foot problems use shoe inserts
- Avoid running on hard surfaces
- Wear proper fitting good quality running shoes with shock absorption
- Avoid running straight down hills; instead walk down or run in a zigzag pattern
- Warm up for 5 minutes before starting any exercise.
- Also stretch after exercising

<http://orthoinfo.aaos.org/topic.cfm?topic=a00382>



Control your weight (File #: 14097925)



Gradual increase (File #: 18025383)



Use shoe inserts

(<http://www.posturedyn.com/difference.html> )



Avoid running

(<http://birthdayshoes.com/what-are-they> )

## YPO\_ Video storyboard\_ Patellofemoral Pain Syndrome



Wear proper shoes(File #: 12387249)



Running straight down hills(<http://www.laimisenergy.com/2010/02/improve-athletic-performance/> )



Warm up(File #: 16935323)

Runner's knee is the most common overuse injury among runners, but it can also happen to other athletes whose knees are under frequent strain. If you feel knee pain during activity, you should seek advice from your physician.