



11741 Southwest Highway, Palos Heights, IL 60463 (708) 361-8052

## Patellofemoral Pain Syndrome "PFPS"

With the summer months fast approaching it is important to make healthy lifestyle choices.

Eating healthy and exercising is essential for achieving optimal health, disease prevention and weight management. Making these healthy lifestyle choices is about feeling great and having more energy.

Your food choices can reduce your risk of illnesses such as heart disease, cancer and diabetes. Exercising and staying fit builds muscle, lowers cholesterol and eases stress and anxiety. This summer take a look at your daily routine and make some positive changes to your lifestyle.

### Our Location

Commitment Physical Therapy is located at:

11741 Southwest Highway in Palos Heights.

### Our Hours

We are open Monday thru Friday from 9:00am until 5:00pm.

For your convenience, we also offer extended and weekend hours by appointment only.

### What is Patellofemoral Pain Syndrome?

Patellofemoral pain syndrome "PFPS" is a term used to describe pain originating from the region of the patella (kneecap) and femur (thigh bone). It is an extremely common entity and probably the most common complaint of athletes and non-athletes presenting to the physicians who take care of knee problems. Other names for this syndrome include: retropatellar pain, anterior knee pain, and chondromalacia patellae. None of these terms accurately describe the cause of this pain, which remains elusive and poorly understood.

### What are the signs and symptoms of PFPS?

Patients with PFPS describe pain primarily in the front of their knees. It may be unilateral or bilateral. Patients often complain of pain when climbing stairs and especially going down the stairs. They frequently experience pain from prolonged sitting (watching a movie, riding on an airplane) and feel that they have to occasionally straighten their legs out to decrease discomfort. The pain is usually exacerbated by squatting and kneeling. It

is generally an aching pain, but can become sharp in nature and even be associated with a burning sensation. On occasion, patients may describe a sense that their knee may give out on them (pseudo giving way). This occurs particularly when going down the stairs. The onset of symptoms is frequently associated with the start of a new activity or increase in level of intensity of a pre-existing activity.

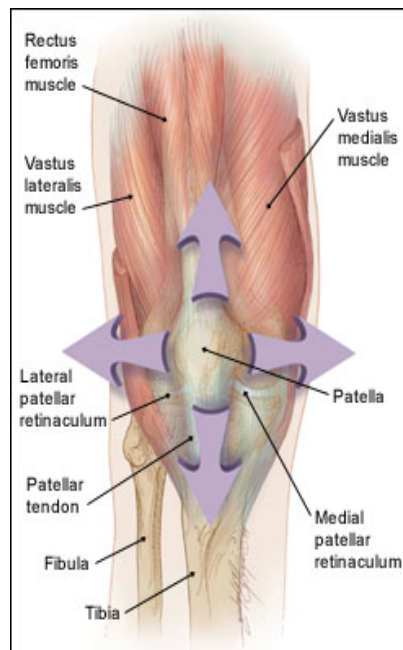


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### What causes PFPS?

The differential diagnosis of anterior knee pain is extensive and includes prepatellar bursitis, patellar and quadriceps tendonitis, patellofemoral arthrosis, patellar

subluxation and dislocation, knee ligamentous and meniscal pathology and rarely soft tissue and bony tumors.

In the past, this entity was called "chondromalacia". Chondromalacia specifically means abnormal softening of the articular cartilage on the undersurface of the patella. This diagnosis requires direct surgical observation and therefore

should not be used synonymously with patellofemoral pain syndrome. With knee flexion and extension, the patella glides through a groove in the distal femur. When the bones in the lower leg are not lined up ideally, it can cause the gliding between the patella and femur to become abnormal. This "malalignment" can lead to overloading of the articulation, generally on the outside of the knee. This abnormal lateral tracking can be painful and lead to

accelerated wear between the surfaces of the bones. Eventually, the protective articular cartilage surface over the bone can wear away, leading to arthritic degeneration. A dramatic example of maltracking between the patella and

## Father 's Day

The glorious sounds of spring...birds chirping, the crack of the bat, and children once again able to enjoy the outdoors.

Did spring finally arrive in Chicago? Pretty soon all of the fun summer holidays will be upon us!

**Father's Day** is a wonderful day this month to celebrate the man or men in our lives.

They deserve to be celebrated for their hard work and devotion to all they provide their family.

As I get older I realize the gifts matter less and the time spent means so much more.

So, think of what would make Dad happy and surprise him. I think I need to make a tee time for my husband (from the children of course) and think my Dad needs some of my baking and a leisurely visit.

**However you spend the day please enjoy the time with your loved ones!**

femur is patellar dislocation or subluxation (partial dislocation). These events are typically traumatic and may be caused either by an indirect mechanism (typically twisting of the body) or by a direct blow. Often a single instability episode becomes the precursor for recurrent instability episodes, particularly when the limb is malaligned to begin with.

Several anatomic and congenital factors may lead to a predisposition towards patellofemoral pain and/or instability. Tightness of the quadriceps muscles, hamstrings and iliotibial band, and relative weakness of the quadriceps muscles are probably the most common causes. Other factors that can contribute to this problem include femoral anteversion (excessive rotation of the hips), tibial torsion (excessive rotation of the shin bone), genu valgum (knock knees), genu recurvatum (hyperextended knee) and excessive pronation (flat feet).

## Continue: PFPS

### How is patellofemoral pain treated?

Treatment for PFPS involves a combination of activity modification, anti-inflammatory modalities and a comprehensive physical therapy program. Surgical intervention is rarely necessary and is generally reserved for cases of recalcitrant instability or symptomatic malalignment. To the extent that PFPS are caused by a change in activity level, or exacerbated by specific activity, activity modification is the mainstay of treatment. Treatment of acute onset of PFPS from a specific event, such as running a marathon or initiating a new exercise program, is relatively straightforward. In general, this would involve an initial period of rest, ice, over the counter anti-inflammatory and a slow, gradual resumption of activities in a progressive manner.

Chronic, recalcitrant PFPS is much more difficult to treat. The mainstay of treatment for chronic PFPS is a combination of strengthening in addition to stretching exercises.

### Exercises and Physical Therapy

Exercises for PFPS are based on the muscular causes such as; weakness of the quadriceps muscles, tight iliotibial band, tightness hamstring muscles, weakness or tightness of the hip muscles and/or tight of the calf muscles. Quadriceps strengthening is most commonly recommended because the quadriceps muscles play a significant role in patellar movement. Hip, hamstring, calf and iliotibial band stretching may also be important. The decision to incorporate these additional exercises depends on an accurate physical examination. It is often helpful to refer patients to a physical therapist for a few sessions of hands-on instruction of the appropriate exercise program. Occasionally, electric stimulation, biofeedback and McConnell taping techniques are useful. Dedicated patients can often manage physical therapy on their own, with 20 minutes per day being a reasonable expectation. Guidance from your physical therapist can be helpful, but patients need to adhere to the therapist's recommended home program and should not expect overnight success.

### Patients' Comments

"I liked the personal attention that each individual patient received."  
N.L., Palos Park, IL

"I felt a lot of improvement with each visit and always felt better when I left the office."

B.K., Justice, IL



"The Dr. was extremely friendly and knowledgeable."  
V.P., Blue Island, IL

"I was very happy with the way I was treated and there is nothing that could have been done to make my visits any better."

S.R., Chicago, IL