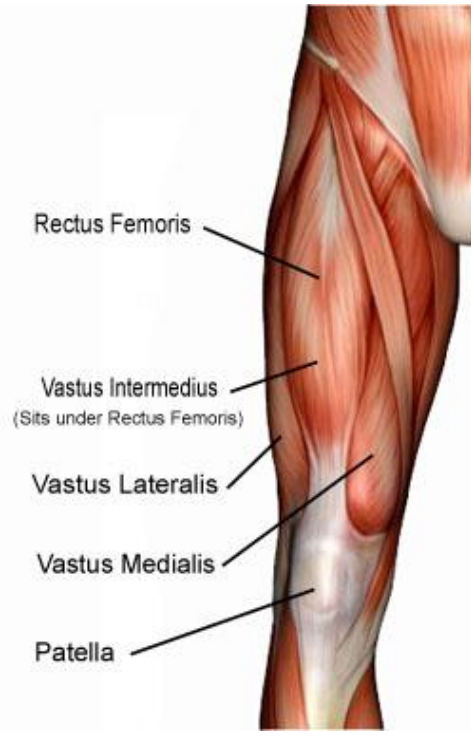
Runner's Knee (Patellofemoral Pain Syndrome)

The Holidays are now over, the New Year's Resolutions have been made, and the race calendar for 2011 is full. This means that you and a whole lot of other people are back to a consistent training program after a brief period of exercise hibernation for the winter. Taking a running sabbatical is great, and is something that I do every year; however, too often people forget that just because they could run 10 miles at an 8:00 min/mile pace back in August, that doesn't mean their body is conditioned to perform at this level after 3 months of minimal running. Jumping back into a training program too quickly often leads to an early season overuse injury. Over the past month, one of the primary complaints I have been treating people for is pain underneath their kneecap; and not surprisingly, they tell a story of getting back into their training program too aggressively. Often times they describe this pain as: worse when getting up from a seated position (especially after having their knees bent for an extended period), pain going up or down stairs, or simply pain when they push on their kneecap.

The kneecap (patella) is harnessed to the knee joint by the tendon of the thigh muscles (quadriceps) from the top, and anchored by the patellar tendon to the shin-bone (tibia) below. The backside of the kneecap is grooved and covered with a smooth piece of cartilage that fits nicely between the knobby end of the thigh bone (femur) and the top of the shin-bone. Therefore, in an ideal situation, as the knee bends, the kneecap should glide smoothly within the grooves of these two bones. However, occasionally when there is a sudden increase in exercise frequency, repetitive stress to the knee joint, and/or poor biomechanics, this can lead to pain at or around the patella.



This pain is often caused when the patella does not glide smoothly and rubs against the tibia and femur during flexion and straightening of the knee. The thigh muscles (quadriceps) are a group of four muscles that come together and form the patellar tendon. If one side, most often the outside muscle (Vastus Lateralis) is too tight or overdeveloped, it can pull the patella to the outside which can cause the back of the patella to "grind" in the knee joint, as it is flexed and extended, because it no longer glides smoothly as described above. This type of situation is also often appropriately termed patellar tracking syndrome.

So what can you do about this type of situation? If your symptom of pain behind the kneecap persists for longer than a week, you should make an appointment with your doctor for an examination. Based on the exam findings, your doctor will diagnose your condition and then prescribe an appropriate rehabilitation program.

In the case of "Runner's Knee," the most common recommendations are: rest, ice, therapeutic modalities (e.g. ultrasound, low level laser therapy, etc.), and the use of anti-inflammatory medication (NSAIDs). These recommendations are usually a good start (although, read my previous blog post on NSAID usage). However, there must be an active component to the rehabilitation of "Runner's Knee." A specific exercise program to balance the quadriceps muscular imbalance is imperative for correcting the aberrant patellar tracking. Also, myofascial release (Active Release Technique and Graston Technique) is an important component of the rehabilitative process as this, too, aids in balancing the tension of the muscles that stabilize the kneecap. Kinesio Taping can also provide a mechanical correction that helps improve the biomechanics of the knee and braces, such as the Cho-Pat, can also help alleviate symptoms while training the muscles to hold the patella in a better position.

"Runner's Knee" is a condition that often times resolves quickly with the appropriate treatment. If you have any of the symptoms described above, please contact InHealth for an evaluation and treatment so you can start the process of getting back to pain free running.

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