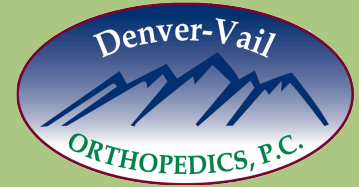
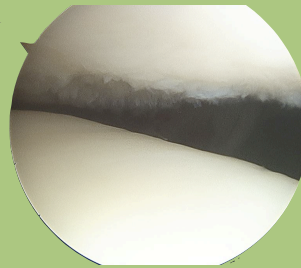
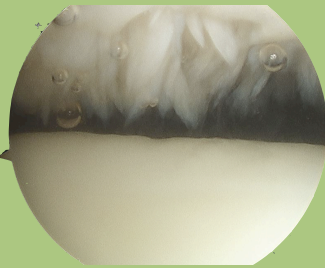


Chondromalacia Patella Exercises



www.davidostermd.com

David M. Oster, M.D.

Chondromalacia Patella

Chondromalacia patella is defined as softening of the articular cartilage underneath the kneecap (patella). Articular cartilage is a very specialized structure that covers the surfaces of bone. Its function is to distribute load to the underlying bone. In the aging process the cartilage loses some of its molecules that help give its biomechanical properties. As these molecules are lost the cartilage softens and no longer distributes load over a wide surface area, instead the force gets transmitted more directly to the underlying bone. The subchondral (bone below the cartilage) is now seeing greater loads and this activates nerve fibers, which causes pain.

Patients with chondromalacia patella usually have symptoms of pain and crepitus (popping and clicking). The pain that people usually experience is located over the anterior aspect of the knee or underneath the kneecap. The pain is usually exacerbated (worsened) with high impact activities, squatting, kneeling, going up and down stairs, sitting in one position for a period of time, lunges and jumping.

Exercises for Chondromalacia Patella

There are certain exercises that will exacerbate pain and swelling in people that have chondromalacia patella. High impact activities such as running, jumping (basketball, volleyball, skiing the bumps), as well as lunges, deep squats and step ups are exercises that place

high loads on the patellofemoral joint. These exercises in general should be avoided.

It is important to maintain good muscle strength in your legs as the muscles will act as internal shock absorbers and protect the knee joint. There are exercises that are more “kneecap friendly” and these include low impact exercises such as biking (stationary or outside), elliptical trainer, water aerobics, walking (level surfaces, avoid hills particularly down hills, and uneven ground).

Strengthening is very important but there are certain exercises that put more force on the patellofemoral joint. One should avoid lunges, deep squats and leg extensions. Exercises that are more forgiving and put less load on the kneecap are leg presses (0-60°), mini squats (0-60°), and hamstring curls (full range of motion). Other exercises that are important are hip abductor exercises as well as CORE strengthening.

These are general guidelines for patients with chondromalacia patella and this is a good starting point. If problems continue, it would be best to work with a physical therapist and tailor an exercise program that improves your strength and aerobic capacity without worsening your symptoms.

In the next few months I will have a video demonstrating various exercises.

