



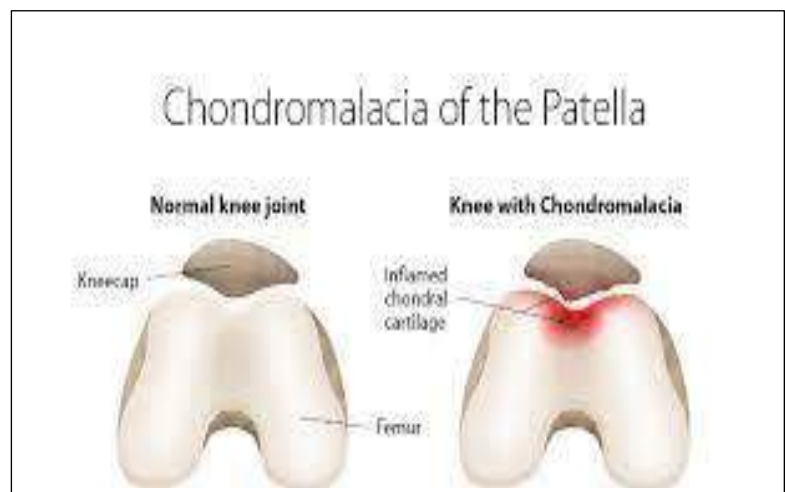
Knee Cap (Patella) Pain

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You have damage to the protective surface (articular cartilage) of the knee cap (patella) and or the groove that the patella tracks through (trochlea). The patella is a small bone in the quadriceps muscle which can take a huge load when you bend, squat or load your knee. This can lead to your articular cartilage wearing out. This is known as chondromalacia patella. The articular cartilage surface can become irregular whereby moving the patella results in a graunching feeling known as crepitus and or catching. If the articular cartilage is worn through this puts a lot of load through the patella bone which causes pain in front of the knee.



Chondromalacia Patella

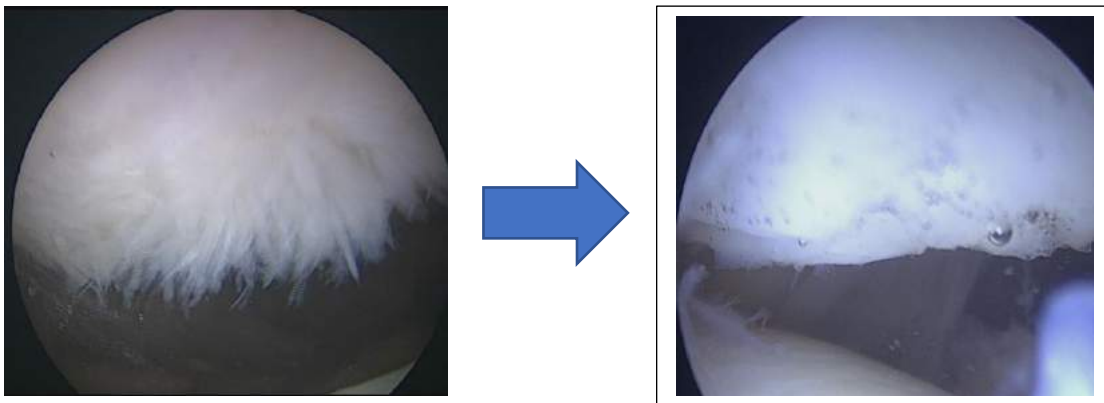


When your knee is straight you put minimal load through your patella so keep it straight as much as possible . Bending your knee to a right angle will put six times more load through your damaged kneecap while fully bending it will put ten times more load. SO avoid squats, lunges and knee extension exercises as they overload your patella The patella is a bone in your quadriceps muscle so the weaker the quads muscle the more load you put through your patella. The key is to strengthen your quads without overloading your patella. The best exercise shown below is to put ankle

weights on and lift leg the straight up and hold it for 20 seconds. Ankle weights can be bought online or instore at The Warehouse or Rebel Sport



An exercycle or bike is also good for quads strengthening just ensure the seat is set high so you don't bend your knee to much when doing a revolution. If any exercise causes pain and swelling stop doing it
If you have significant mechanical symptoms such as catching and locking off the patella you may benefit from keyhole surgery to smooth out the roughened cartilage. This is likely to improve your pain but not resolve it



If the patella is out of alignment so that it is wearing out one side it can be realigned via keyhole surgery most of the time – A lateral release .

If there is overhanging bone on the outside of the patella thus can be removed to realign the patella - A lateral facetectomy. In some patients the patella tendon which connects the patella to the tibia inserts in a position which wears out one half of the patella and this can be moved to a better position - A tibial tubercle osteotomy.