

Viscosupplementation Information

What is Viscosupplementation?

A big word. But first, it is important to understand the mechanics of the knee and arthritis. Knee joints are composed of bone on either side of the joint, cartilage on both sides of the bone, and a single unit of free floating cartilage between the two layers of cartilage, known as the meniscus. Essentially, a sandwich of three layers of cartilage between the two bones of the knee.

Cartilage does not have a blood supply, and it depends on the fluid in the joint for sugar and oxygen. Cartilage is a bit like a sponge, and the fluid is squeezed in and out of the cartilage by joint movement. Arthritis starts as deterioration of the cartilage, which is why maintenance of the cartilage is critical. When cartilage deteriorates, the bone underneath reacts to protect itself by laying down more bone, thicker and wider.

We know the quality of the joint liquid deteriorates with arthritis, which impairs the liquid's ability to transfer nutrients and oxygen to cartilage cells. Viscosupplementation targets the quality of the liquid by adding a specific protein.

What conditions benefit from Viscosupplementation?

Though more commonly used for arthritic knees, viscosupplementation is occasionally used for arthritic hips, shoulders, and ankles. It is directly injected into the joint space. In the knee this is fairly easy, while other joints require the use of ultrasound to improve accuracy.

This treatment works in over 60 per cent of arthritic knee cases, though the effectiveness decreases with the severity of the osteoarthritis. Improvement in symptoms can occur within days, but it may take up to six weeks to notice the full effect. If effective, the injections last six to twelve months.

What are the risks of Viscosupplementation?

There are few side effects, but they are rare. You may experience increased pain for a few days afterwards which is a flare reaction to newly introduced protein, which should diminish with acetaminophen (Tylenol) and icing. As with any injection, there is a very small chance of infection. If you experience increased swelling, redness and heat, or fever, seek medical attention.

If viscosupplementation works for you, the injections can be repeated as often as needed. However, remember that the prime treatment of arthritis is exercise, and to seek help if you cannot carry out your exercise protocol.