

Viscosupplementation Injections

What are viscosupplementation "lubricant" injections?

Viscosupplementation is a minimally invasive, non-surgical method of improving the symptoms of mild to moderate hip arthritis. Typically used as a one part of a coordinated non-surgical management plan, viscosupplementation provides medium term pain reduction and functional improvement. Viscosupplementation injections reduce amount of tablet medications required to adequately control arthritis symptoms.

Viscosupplementation has traditionally been used for the management of knee osteoarthritis, however injectable therapies may also be applied to other joints. Viscosupplementation injections for the management of hip conditions has become common practice over the last decade.

How is viscosupplementation conducted?

Viscosupplementation is an injectable therapy. To ensure the procedure is conducted accurately, injections into the hip joint require radiologic image guidance. As an Accredited Diagnostic Imaging service provider, the Brisbane Hip Clinic provides a viscosupplementation injection service using ultrasound guidance to ensure accurate delivery of the medication into the joint. The injection can easily be conducted in a clinic environment - no anaesthetic or sedation is required and generally the procedure is very well tolerated. You may alternatively choose to have your injection performed at a local radiology service provider closer to your home if this is more convenient.

What is injected?

All viscosupplements contain the active ingredient Sodium Hyaluronate. Hyaluronate is a naturally occurring substance found within the joint lubricant known as synovial fluid. Hyaluronate (as part of the synovial fluid) acts to lubricate, cushion and protect the joint cartilage surfaces.

There are a number of different types of viscosupplementation injection preparations available in Australia. These include [Synvisc](#), [Euflexxa](#) and [Durolane](#). The dose of Hyaluronate administered depends on the preparation used. There may be some people who are more suited to one particular type of viscosupplement compared to others.

How does viscosupplementation work?

As the hip joint becomes worn, the natural joint lubricant (synovial fluid) becomes increasingly thin. Viscosupplementation stimulates the cells lining the outside of the joint to produce a better quality synovial fluid, returning to a more normal thickness (viscosity). In this respect, the "lubricant" delivered to the damaged hip is effectively manufactured by the joint itself - the action of the viscosupplementation injection is simply to stimulate the joint to produce a better quality synovial fluid.

How many injections and how often?

For the hip joint I recommend initial treatment with a single injection only. Generally I would not recommend repeat injections before 6 months, although it is certainly safe to do so if necessary. Over-lapping benefits are observed with

subsequent injections if conducted within a 12 month period.

What are the benefits?

On average people experience a 30% improvement in pain symptoms for 6-18 months. The medication is generally slow to take effect with partial results at 4 weeks and peak effect at around 8-12 weeks. Not all people will respond to viscosupplementation - generally people with more severe degrees of osteoarthritis obtain less benefit.

What are the risks?

Some people experience local joint irritation for 2-3 of days after the injection. The risk of infection is less than 1/1000. Avian derived viscosupplementation preparations (Synvisc) are more likely to cause joint irritation after injection, however the incidence is still low.

As Synvisc is partly derived from avian products (chicken), people who have a known allergy to poultry or have religious/ personal objections to the use of animal products should not be treated with Synvisc. In these situations, alternative products are available (Euflexxa, Durolane).

Related publications

Scientific publications and research initiatives developed by the Brisbane Hip Clinic may be accessed via [this link](#).

This information has been written for the purposes of patient education. The details provided are of general nature only and do not substitute for professional recommendations based on an individual clinical assessment. ©; A/Prof Patrick Weinrauch. Brisbane Hip Clinic.