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Hyaluronan gel injections for treating osteoarthritis

What is hyaluronan (hyaluronic acid)?

Hyaluronic acid is a medication presented in gel format for treating osteoarthritis, primarily knee osteoarthritis. It has been studied for many years and is considered a well-established (not experimental) treatment

What are the benefits of hyaluronan for osteoarthritis?

With respect to the knee osteoarthritis (OA), it is expected that many patients have relief of symptoms that last from weeks to many months after injection with gel. There is no expectation of cure of knee OA, as sadly knee OA is an incurable disease. The benefits that have been studied relate to reduced pain and increased mobility, and these have been studied compared to placebo injections and cortisone injections.

What are the types of hyaluronan available in Australia?

There are three brands of hyaluronan available in Australia. The most established brand is Synvisc, which is available in 3 x 2ml injections or 1 x 6ml injection. Two recently introduced (to Australia) brands are Durolane and Euflexxa, although both of these brands have been available for many years overseas. Compared to Synvisc, Durolane appears to have slightly longer duration of action/symptom relief, but may be more prone to giving the side effect of stiffness after injection. Euflexxa probably has the least side effects, but probably also has the shortest duration of effect. These differences probably relate to size of molecule.

Synvisc can be ordered at the following number: **1800 355 929**

Euflexxa can be ordered at the following number: **1800 786 217**

Durolane can be ordered at the following number: **1800 428 220**

Are there harms and risks of injecting hyaluronan?

Although quite rare side effects (e.g. 1 in 100 to 1 in 1000 on the first injection), infection at the injection site and allergic reactions can occur. If pain at the site persists beyond 48-72 hours then please return for medical review to make sure neither of these complications has occurred. It appears that allergic reaction is

more likely the more injections that have been given. If you have had multiple previous injections, you are actually more likely to get an allergic reaction so should watch out for this side effect when having repeat injections.

Generally because hyaluronan is a natural component of human and animal cartilage, it is unlikely that any long-term damage occurs to the joint from injections. There are studies from the USA showing that patients who have repeated knee joint injections are less likely to progress to knee replacement. It is probably safer long-term to use hyaluronan than cortisone (which is the other commonly studied injection option) and safer to use it than other injection options that have been less well researched. However, performing no intervention (injection) is generally “safer” than even minimally invasive injections.

Are there any alternatives to a hyaluronan gel injection?

There are definitely options that can be used instead – injections are never compulsory. Since an injection is generally used for treating pain, the first option is no treatment if you are comfortable putting up with the pain.

How is hyaluronan gel administered?

The skin is prepared using an antiseptic agent to reduce risk of infection

The degree of discomfort during the procedure is generally mild to moderate and sometimes a local anaesthetic is injected prior to just under the skin.

The needle is often guided into the relevant body part using an ultrasound (knee joint or other deeper joints such as hip).

Usually the patient will sit in the waiting room for 5-10 minutes after the injection gently moving the joint to prevent “stickiness” of the joint as the gel is highly viscous.

How many gel injections are permitted?

There is no known toxicity with respect to repeat injections and Gel injections have been studied widely. The main reason for not performing “repeat” injections is if the effect of prior injections is poor. Because gel is moderately expensive, most patients would want to observe excellent results (pain and activity improvement) in order to justify ordering further injections