

Viscosupplementation (i.e Orthovisc, Synvisc, etc.) Injections

The first line of treatment for osteoarthritis of the knee aims to relieve pain. Normally, pain relievers such as ibuprofen or nonsteroidal anti-inflammatory drugs (NSAIDs) are used, along with physical therapy, applications of a topical analgesic and injections of a corticosteroid. However, some people have a reaction to NSAIDs and these agents usually bring only temporary relief.

A relatively new procedure, called viscosupplementation, injects a preparation of hyaluronic acid into the knee joint. Hyaluronic acid is a naturally occurring substance found in the synovial (joint) fluid. It acts as a lubricant to enable bones to move smoothly over each other and as a shock absorber for joint loads.

People with osteoarthritis ("wear-and-tear" arthritis) have a lower-than-normal concentration of hyaluronic acid in their joints. Viscosupplementation may be a therapeutic option for individuals with osteoarthritis of the knee.

Effects of Viscosupplementation

Viscosupplementation has been shown to relieve pain in many patients who cannot get relief from nonmedicinal measures or analgesic drugs. The technique has been used in Europe and Asia for several years, but the U.S. Food and Drug Administration did not approve it until 1997, and then only for treating osteoarthritis of the knee. Several preparations of hyaluronic acid are now commercially available.

Immediate Effects

- Hyaluronic acid does not have an immediate pain-relieving effect.
- You may notice a local reaction, such as pain, warmth, and slight swelling immediately after the shot. These symptoms generally do not last long. You may want to apply an ice pack to help ease them.
- For the first 48 hours after the shot, you should avoid excessive weightbearing on the leg, such as standing for long periods, jogging or heavy lifting.

Longer Term Effects

- Over the course of the injections, you may notice that you have less pain in your knee.
- Hyaluronic acid does seem to have anti-inflammatory and pain-relieving properties. The injections may also stimulate the body to produce more of its own hyaluronic acid.
- Effects may last for several months.

Treatment

If there is any swelling (effusion) in the knee, your physician will remove (aspirate) the excess fluids before injecting the hyaluronic acid. Usually, this can be done at the same time, with only one needle injected into the joint, although some doctors may prefer to use two separate syringes. Depending on the product used, you will receive 3 to 5 shots over several weeks.

Outcome

Viscosupplementation can be helpful for people whose arthritis has not responded to basic treatments. It is most effective if the arthritis is in its early stages (mild to moderate). Some patients may feel pain at the injection site, and occasionally the injections result in increased swelling.

The long-term efficacy of viscosupplementation is not yet known and research continues in this area.

If your arthritis is not responding well or if you are trying to delay surgery, you may wish to discuss this option with your orthopaedic surgeon.

Source: American Academy of Orthopaedics Website.
<http://orthoinfo.aaos.org/topic.cfm?topic=A00217>