Immediate Effects

Viscosupplementation Treatment for Arthritis

Although there is no cure for osteoarthritis of the knee, there are many treatment options available. The primary goals of treatment are to relieve pain and restore function.

In its early stages, arthritis of the knee is treated with nonsurgical methods. Some of the more common options include changes in activity level, pain relievers such as acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen, as well as physical therapy, and corticosteroid injections.

Another treatment option is a procedure called viscosupplementation. In this procedure, a gel-like fluid called hyaluronic acid is injected 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 have not responded to other nonsurgical methods. The technique was first used in Europe and Asia, and was approved by the U.S. Food and Drug Administration in 1997. Several preparations of hyaluronic acid are now commercially available.

- Hyaluronic acid does not have an immediate pain-relieving effect.
- For the first 48 hours after the shot, you should avoid excessive weight bearing on the leg, such as standing for long periods, jogging or heavy lifting.
- 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.
- Rarely, patients may develop a local allergy-like reaction in the knee. In these cases, the knee may become full of fluid, red, warm, and painful. If this occurs, contact your doctor immediately.
- Infection and bleeding are also very rare complications of this procedure.

Procedure

During the procedure, if there is any swelling in your knee, your doctor 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 one to five 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. It may take several weeks to notice an improvement after viscosupplementation. Not all patients will have relief of pain.

If the injections are effective they may be repeated after a period of time, usually 6 months.

The long-term effectiveness 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.

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