

# Viscosupplementation Injections

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Although they have been used to treat osteoarthritis (OA) for more than 20 years, viscosupplementation or “visco” injections are still viewed as one of the newer advances for treating OA.

Viscosupplementation involves injecting a thick fluid made up of hyaluronic acid (HA) into the joint. HA is the “building block” that makes up the thick synovial fluid that naturally lubricates the knee joint. In a joint affected by OA, the synovial fluid becomes thinner and does not absorb shock as well.

Originally thought to act simply as a “lubricant”, viscosupplementation has a more complex action that involves stimulating the joint lining to produce more synovial fluid naturally. Synovial fluid is important in shock absorption, lubrication and nutrition of the cartilage cells. Research has shown that viscosupplementation or “visco” injections (e.g., Monovisc, Durolane, Synvisc) can decrease pain and disability from knee osteoarthritis for prolonged periods. Research tends to indicate that it can last for up to 6 to 12 months. Visco injections tend to start working within 1 to 2 weeks after the injection.

Visco injections tend to work best in cases of mild to moderate osteoarthritis so people should view viscosupplementation as an early treatment option as opposed to a “last-chance” option. Also, “visco” injections do not have an anti-inflammatory effect so may not be the best option for those who have a very painfully swollen and inflamed joint. Besides the

possible side effects that are possible with all injections (see reverse), visco injections have been shown to be a safe treatment in research studies. Certain brands of these injections have been associated to rarely cause an inflammatory reaction causing pain and swelling for 1 to 2 weeks. Research has not shown any long-term side effects from visco injections.

## Summary:

Viscosupplementation is a very good treatment option for osteoarthritis and has been used safely and effectively for over 20 years. Although visco injections do not help to regenerate articular or surface cartilage, these injections can play an important role in treating OA by decreasing pain and improving function for a prolonged period (6 to 12 months).



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## **Possible Side Effects with All Injections**

Injections that are performed by a properly trained physician tend to be a relatively safe procedure. However, there are possible side effects that are possible with any type of injection. These include the following:

- Local pain or discomfort during or after the injection (e.g., needle discomfort, temporary tightness or fullness after the injection).
- Skin bruising, bleeding or discoloration
- Local tissue irritation and/or swelling
- Allergy to the local analgesic (“freezing”) agent (topical xylocaine)
- Suffering a “vasovagal reaction” (fainting or feeling weak/faint/dizzy)
- Infection (risk is estimated statistically to be between 1:10,000 to 1:50,000)
- Needle break
- Nerve injury
- Blood vessel injury
- Lack of improvement
- Worsened pain or function

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