

What to Expect: Knee hyaluronic acid (gel/viscosupplement) Injection

What it's for

Most commonly used for:

- **Knee osteoarthritis**, especially mild–moderate disease
- Patients who did not get lasting relief from steroid injections
- People trying to **delay knee replacement** or reduce pain with activity

Hyaluronic acid (HA) is a **joint lubricant and shock absorber**, not an anti-inflammatory steroid.

Multiple HA brands (Durolane, Hyalgan, Euflexxa, Supartz, and Synvisc) are widely used, but **there's no strong evidence that any one product reliably gives better outcomes** than the others for pain/function improvement.

- Some are **single-injection products** (e.g., Monovisc, Synvisc-One) and others are **multi-injection series** (e.g., Hyalgan, Supartz), which may affect convenience but *not necessarily effectiveness*.

Before the injection

- **Tell your provider if you:**
 - Have a known allergy to HA products (rare)
 - Have a knee infection or significant skin rash
 - Are on blood thinners
- **No special preparation** is usually needed.
- Some insurance plans require **prior authorization**

During the procedure (about 5–10 minutes)

1. **Position:** Sitting or lying down with the knee slightly bent.
2. **Skin cleaning:** Thorough antiseptic prep.
3. **Fluid removal (if needed):**

- If swelling is present, fluid may be aspirated first.
- 4. **Injection:**
 - HA is injected into the knee joint.
 - Ultrasound guidance may be used to improve accuracy.
- 5. **What you'll feel:**
 - A pinch at the skin
 - Pressure or tightness in the knee (HA is thicker than steroid)

Immediately after

- You can usually **walk out on your own**.
- The knee may feel **full, stiff, or mildly sore**.
- Immediate pain relief is **not expected** (no anesthetic effect like steroids).

First 24–72 hours

- **Post-injection soreness or swelling** is common.
- A small percentage of patients develop a “**pseudoseptic reaction**”:
 - Marked swelling, warmth, and pain within 24–72 hours
 - Looks alarming but is not infection
 - Usually resolves with rest, ice, and anti-inflammatory meds
- **Activity:**
 - Avoid high-impact activity, kneeling, squatting, or long walks for **48 hours**.
- **Ice:**
 - 15–20 minutes at a time as needed.

When improvement occurs

- **Onset of benefit:**
 - Gradual—typically **2–6 weeks** after injection.
- **Peak benefit:**
 - Around **8–12 weeks**.
- **Duration of relief:**
 - Often **4–6 months**, sometimes longer.

Unlike steroid injections, HA works slowly but may last longer.

Single vs series injections

- Some products are **one injection**.

- Others are given as a **series of 3–5 weekly injections**.
 - Effectiveness is similar; choice depends on product and insurance.
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Common side effects

Usually mild

- Knee soreness or swelling
- Stiffness
- Bruising at injection site

Rare

- Allergic-type reaction
 - Significant inflammatory response (pseudoseptic reaction)
 - Infection (very rare)
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How often can HA injections be repeated?

- Typically **every 6 months** if helpful.
 - No known cartilage-damaging effect like repeated steroids.
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Who benefits most

- Mild to moderate osteoarthritis
- Mechanical pain (worse with activity, better with rest)
- Preserved joint space on X-ray
- Younger or active patients trying to delay surgery

Less effective in **advanced “bone-on-bone” arthritis**, but some still get benefit.

Tips to maximize benefit

- Pair with **strengthening (especially quads and hips)**.
- Maintain healthy body weight.
- Use supportive footwear or braces if recommended.
- Set expectations: HA improves **function and activity tolerance** more than pain at rest.