

Pyrocarbon Hemiarthroplasty — Pre-Operative Patient Guide

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Shoulder Arthritis — Pyrocarbon Humeral Head Replacement

Your Condition & Procedure

The condition

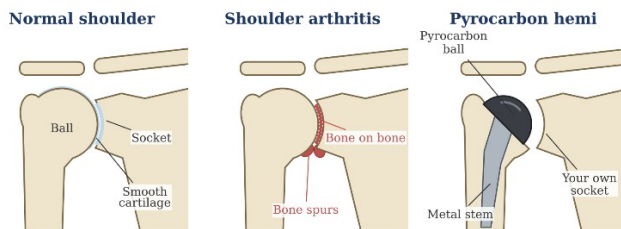
Shoulder arthritis is the wearing away of the smooth **cartilage** that covers the ball (humeral head) and socket (glenoid). In some shoulders the socket wears unevenly and the ball drifts off center. This causes deep aching pain, grinding, stiffness, and trouble sleeping and reaching.

The surgery

Only the worn ball is replaced, through an incision at the front of the shoulder, with a **pyrocarbon** head—a very smooth, material that is gentle on the socket. Keeping your own socket saves bone, which suits younger, active patients. The new ball can recenter the shoulder and help an uneven socket remodel. A front tendon is opened and repaired, so the shoulder is protected early on. While this procedure is durable and retains much of your own shoulder, it often requires revision to a full replacement at some point, years down the line, especially when done in young patients.

Risks & benefits

Benefits: Most patients have major pain relief and better motion, while keeping their own socket bone for the future. **Risks** are uncommon and include infection, blood clots, socket wear over time (which may later need conversion to a total shoulder replacement), implant loosening, failure of the tendon repair, instability, fracture around the implant, injury to nearby structures (such as nerves or blood vessels), stiffness, persistent pain, and the need for further surgery. These will be reviewed with you in detail before surgery.



Shoulder arthritis and pyrocarbon hemiarthroplasty (illustration)

Before Surgery

- **Medications:** We will tell you what to stop and when (e.g., blood thinners, anti-inflammatories, some supplements, weight-loss injections).
- **Fasting:** Follow the instructions from your surgery coordinator/facility. In general, you should have nothing to eat or drink starting at midnight the night before surgery.
- **Nicotine:** Stop all nicotine products—they slow healing.
- **Equipment:** A sling is typically provided at or before surgery.
- **Physical therapy:** Schedule your first visit for within about a week after surgery.
- **Home:** Plan for a helper at first; a recliner can make sleep easier.
- **Medical history:** Let us know if you or anyone in your family has a history of blood clot disorders or a malignant hyperthermia reaction to anesthesia.
- **Health:** Call us if you develop a fever, illness, or skin problem near the shoulder.

Day of Surgery

- If instructed, take blood pressure/heart medications with a small sip of water.
- Arrive at the time given by your surgery coordinator.
- Bring your medication list, insurance card, photo ID, and sling if you have them.
- Wear a loose, button-front shirt; leave jewelry and valuables at home.
- A responsible adult must drive you home. You may **not** drive yourself.

Immediately After Surgery

- You will recover in the recovery area; many patients go home the same day, and some stay overnight.
- Your surgeon will discuss the procedure with you and your support person.
- Your care team will review wound care, restrictions, medications, follow-up, and warning signs before discharge.

Milestone	What to Expect After Surgery (General Timeline)
Sling	Worn for 6 weeks, removed only for hygiene and therapy exercises. Gentle assisted motion begins right away.
Daily life	For 6 weeks: no lifting or pushing up from a chair with the surgical arm; then no more than 1–2 lb until 12 weeks. No reaching behind your back for 8 weeks. No driving while taking narcotic pain medication.
Lifting & overhead	Strengthening begins at 12 weeks with light weights. Most patients can reach overhead by ~3 months; strength keeps improving for a year or more.
Activity	Light recreation (such as golf chipping) ~4 months and full activity at 6 months. No long-term restrictions are placed.
► Please note: This is a general guide only. Detailed post-operative instructions will be provided on the day of surgery, and your restrictions and timeline may change based on the findings and procedures performed.	

Learn More

We **strongly recommend** reading these pages from the American Academy of Orthopaedic Surgeons (OrthoInfo) before your surgery:

- **Your condition: Arthritis of the Shoulder** — <https://orthoinfo.org/en/diseases--conditions/arthritis-of-the-shoulder/>
- **Your procedure: Shoulder Joint Replacement** — <https://orthoinfo.org/en/treatment/shoulder-joint-replacement/>

Video: You may find a video demonstrating an example (not the exact technique) of your surgery at <https://patients.stryker.com/shoulder/treatment-options/shoulder-replacement/implant-solutions/tornier-pyrocarbon>