

OATS Cartilage Transfer (Knee) — Pre-Operative Patient Guide

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Cartilage and Bone Defect of the Femoral Condyle — Osteochondral Autograft Transfer (OATS)

Your Condition & Procedure

The condition

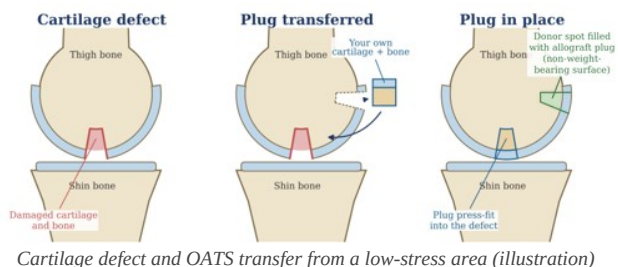
Articular cartilage is the smooth tissue covering the end of the thigh bone (**femoral condyle**). Some smaller defects involve both the cartilage and the bone beneath it—from an injury or osteochondritis dissecans (OCD). They heal poorly on their own and cause pain, swelling, and catching.

The surgery

Osteochondral autograft transfer (OATS) moves one or more small plugs of your own cartilage and bone from a low-stress edge of the knee into the defect, where they are press-fit without screws. It is typically outpatient, through small incisions or a small open incision. Using your own tissue lets the plug heal quickly. The low-stress plug harvest site is then filled with cadaver bone/cartilage.

Risks & benefits

Benefits: Most patients have less pain and better function, with their own living cartilage in the repaired spot. **Risks** are uncommon and include infection, blood clots, pain or swelling where the plugs were taken, the plug not healing or settling, ongoing swelling, injury to nearby structures (such as nerves, blood vessels, or cartilage), stiffness, persistent pain, and the need for further surgery. These will be reviewed with you in detail before surgery.



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 knee brace and crutches are typically arranged beforehand. Practice with crutches.
- **Physical therapy:** Schedule your first visit for within about a week after surgery.
- **Home:** Plan for a helper and remove trip hazards; a shower chair can help.
- **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 knee.

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 brace/crutches if you have them.
- Wear loose clothing; 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; most patients go home the same day.
- 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)
Weight-bearing	Crutches, with weight added in steps: touch-down for 2 weeks, then half, then three-quarters, reaching full by 6–8 weeks (longer for larger or multiple plugs).
Motion	No limits—frequent bending from day 1; stationary bike from 2 weeks. The brace is locked straight for walking until leg control returns and is off by 6 weeks.
Daily life	Desk work often within 2 weeks. No driving while taking narcotic pain medication.
Running	Typically between 4 and 6 months, once x-rays show the plug has healed and strength allows.
Sports	Typically 6–9 months after strength and hop testing; cutting and contact sports may take longer.
► 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 and procedure: Articular Cartilage Restoration** — <https://orthoinfo.org/en/treatment/articular-cartilage-restoration/>

Video: You may find a video demonstrating an example (not the exact technique) of your surgery at

<https://patient.orthopedica.com/student/path/2360856/activity/3748511> (or browse <https://patient.orthopedica.com/student/catalog>).