

Tibial Spine Fracture Fixation — Pre-Operative Patient Guide

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Tibial Spine (ACL Avulsion) Fracture

Your Condition & Procedure

The condition

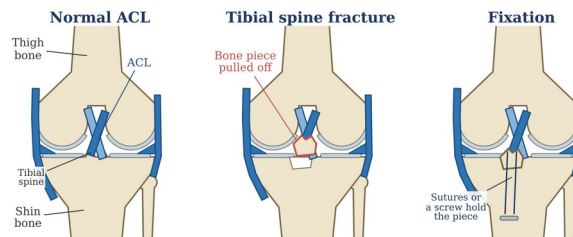
The **ACL** attaches to a bump of bone in the center of the shin bone, the **tibial spine**. In children and some adults, a fall or twist can pull this piece of bone off rather than tearing the ligament. This causes pain, swelling, trouble straightening the knee, and instability. It is functionally similar to an ACL tear.

The surgery

This is an outpatient surgery done through small incisions with a camera. The bone fragment is put back in place and held with strong sutures or a screw, re-tightening the ACL. A trapped meniscus is freed, and in growing children the growth plates are protected. The final plan is determined during surgery.

Risks & benefits

Benefits: Most patients regain a stable knee and return to sports. **Risks** are uncommon and include infection, blood clots, loss of motion (the most common issue; may need another procedure), the fragment not healing, hardware irritation that may require removal, 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.



Tibial spine fracture and fixation (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 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 for the first few days and remove trip hazards.
- **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	Full weight as tolerated with crutches; the brace is locked straight for walking and sleep for 6 weeks.
Motion	Bending to 45° for 2 weeks, then pushed: 90° by 4 weeks and 120° by 6 weeks. Regaining motion early is a priority.
Daily life	School or desk work often within 1–2 weeks; no PE or sports until cleared. No driving while taking narcotic pain medication.
Running	Typically 12–14 weeks, once strength allows.
Sports	No sooner than ~5 months; typically 5–6 months, after strength and hop testing.
► 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 Pediatric Orthopaedic Society of North America (POSNA) before your surgery:

- **Related reading: Tibial Spine avulsion fractures:** <https://orthokids.org/i-broke-my/tibial-spine-avulsion-fractures/>

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

<https://clinician.orthopedica.com/student/page/2746584-anterior-cruciate-ligament-acl-injuries-tibial-spine-avulsion-repair>

Questions before surgery? Call our office at (972) 378-1438. For a medical emergency, call 911.