High Tibial Osteotomy (HTO)

Patient Handout







Background

High Tibial Osteotomy (HTO) is a surgical procedure that realigns the knee joint by cutting and reshaping the upper part of the shinbone (tibia). This helps shift weight away from the damaged or arthritic part of the knee, relieving pain and improving function.

HTO is often recommended for patients with knee arthritis on one side of the knee (commonly the inner side) or for those with bow-legged alignment. This surgery is especially useful for younger, active patients who want to delay or avoid total knee replacement.





GOALS OF HIGH TIBIAL OSTEOTOMY

- Reduce pain: By redistributing weight, the pressure on the knee decreases
- Improve Mobility: Realignment allows for better joint function and more comfortable movement
- Delay arthritis: Helps slow down the worsening of arthritis
- Extend Joint Life: Postpones or avoids the need for knee replacement surgery

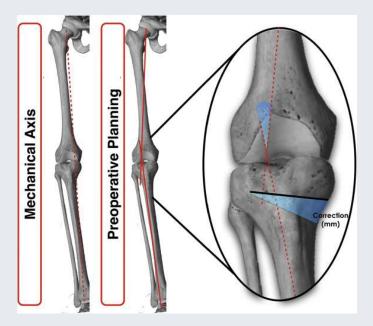
What happens during surgery?

Preoperative Planning:

- X-rays, MRIs, or CT scans are used to plan the surgery.
- Your surgeon will calculate how much correction is needed to realign the knee.

The Procedure:

- **Cutting the Tibia**: The surgeon makes a precise cut in the upper part of the shinbone.
- Repositioning the Bone: The bone is opened or closed to change the alignment of the knee.
- **Securing with Plates and Screws**: Metal plates and screws hold the bone in its new position.



What to expect postoperatively

First Few Weeks:

- You'll use crutches to keep weight off the leg.
- Physical therapy will focus on gentle movement and strengthening.

6-12 Weeks:

- Gradual increase in weightbearing as the bone heals.
- Exercises to rebuild strength and restore mobility.

3-6 Months:

- Return to most daily activities.
- High-impact activities (e.g., running) may take longer to resume.

Frequently asked questions

1. Will I need another surgery later?

-Possibly as arthritis may progress, but HTO can delay the need for knee replacement

2. Can I return to sports?

-Yes, low impact sports like swimming and cycling are encouraged; high-impact activities may need to be limited

3. Will I feel the metal plate?

-Most people don't, but it can be removed after healing if it causes discomfort