

UniPlasty®

Gradual opening-wedge high tibial osteotomy, adjusted under load.

UniPlasty® is a gradual opening-wedge high tibial osteotomy performed with the UniX® Metaphyseal Hinge Fixator, a unilateral external fixator that corrects varus and valgus deformities of the proximal tibial metaphysis in the frontal plane. New bone forms by callus distraction, and the final alignment can be set while the patient bears weight.

MIS Approach

Half pins through small stab incisions; no plate on the tibia.

Early Weight Bearing

Partial weight bearing in daily life during the correction.

No Second Major Surgery

Removal is minimally invasive, typically an outpatient procedure.

Gradual Correction

0.33° per click, two clicks a day, by callus distraction.

Smaller Incision

One ventromedial incision for the osteotomy only.

No Implant Left Behind

Once the pins are out, no material remains in the body.



End of surgery: sutured osteotomy incision. Courtesy of Dr. Ahmet Kekeç

Alignment set under load

The angle is adjusted while the patient bears weight, so the final alignment reflects the ligaments under load.

No bone graft

Gradual distraction of the open wedge may avoid the need for iliac crest bone grafting.

Nerve-friendly

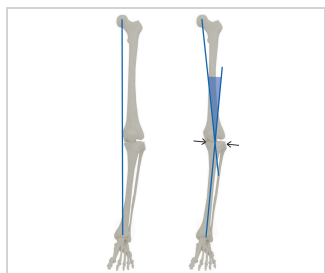
Gradual correction is intended to reduce the peroneal nerve stretch risk of acute correction.

Slope unchanged

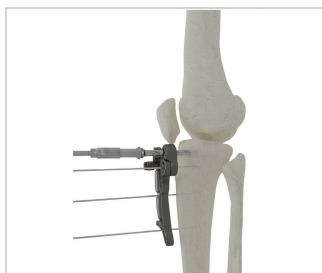
The hinge turns in the frontal plane only; the construct is designed to leave the posterior tibial slope unchanged.

UniPlasty® at a Glance Fixator first, osteotomy second

Four Steps



1 Plan the correction and size on a standing radiograph or at www.SmartFixator.com.



2 Apply the fixator to the intact tibia: four half pins through its fixed-angle cones.

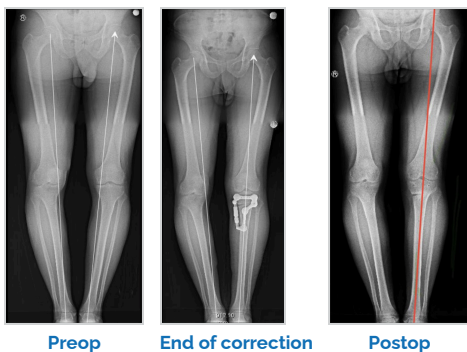


3 Perform the osteotomy with the tibial head already held.



4 After 5-7 days the patient opens the wedge: two clicks a day.

Clinical Case



Preop

End of correction

Postop

Courtesy of Dr. Ahmet Kekeç

Specifications

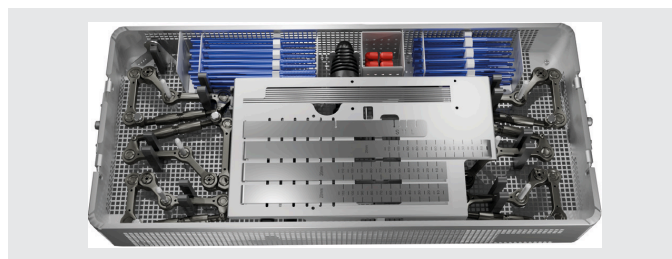
Correction capacity	Up to 20° varus · up to 10° valgus
Size by tibial width	XS 56-64 · S 64-70 · M 70-78 · L 78-88 mm
Profile	9 mm body thickness
Weight	~130 g (125-137 g by size)
Bone fixation	Four 6 mm conical half pins
Material	Titanium alloy (Ti6Al4V ELI)
Correction rate	60° per click = 0.33° · 2 clicks/day = 0.66°
Latency	5-7 days

Indications for Use

The Response Ortho Metaphyseal Fixation System is indicated for treatment of bone conditions including leg lengthening, osteotomies, arthrodesis, fracture fixation, and other bone conditions amenable to treatment by use of the external fixation.

Typical use: varus or valgus proximal tibial deformity, particularly with knee joint laxity as in medial compartment osteoarthritis; can be combined with arthroscopy, cartilage repair or ACL reconstruction.

One Set



Fixator, half pins and instruments in the UniX Metaphyseal Hinge Fixator System Set, 00-9069-17.

CE-marked

FDA-cleared