

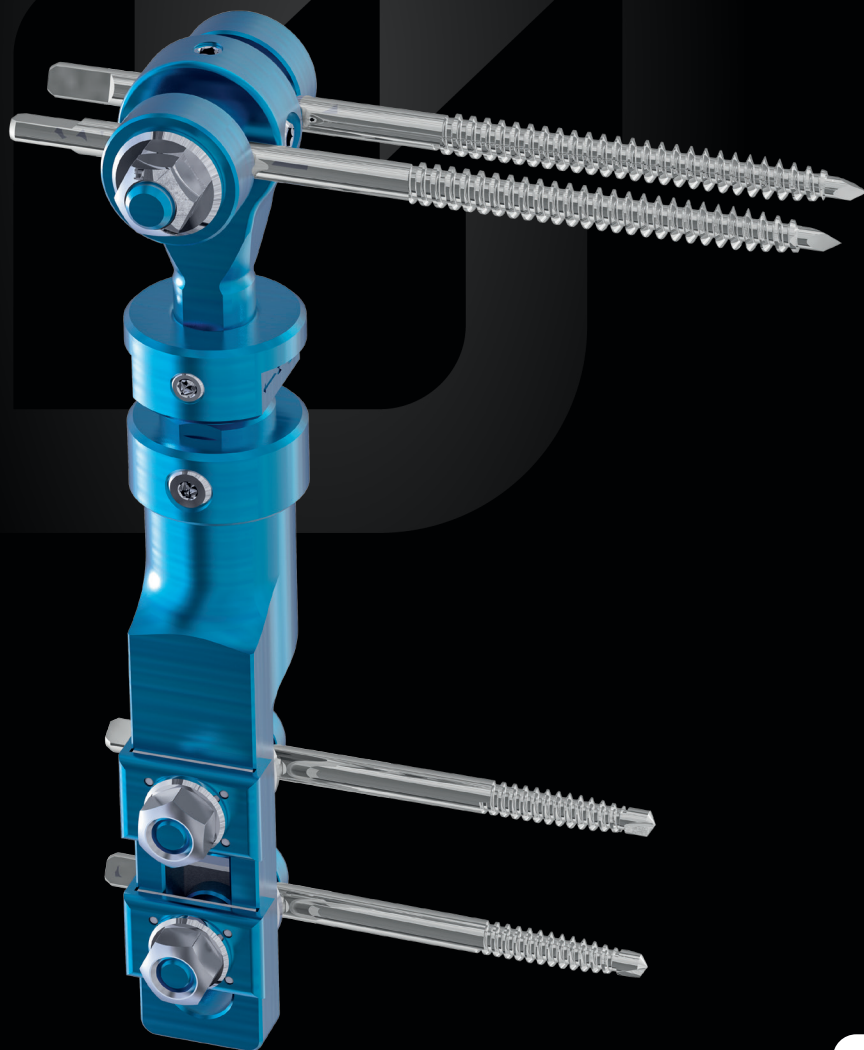
PTA

PROGRESSIVE TIBIAL ALIGNMENT

Gradual correction

Minimally invasive

Sterile kit



Introduction

Medial compartmental osteoarthritis of the knee develops more rapidly if it is associated with a varus of the tibia and a lateral ligament insufficiency. In such circumstance, a metaphyseal realignment through an osteotomy of the tibia is the only solution to reduce the pain and the joint effusion. Such operation, if performed in the initial stages of the condition, delays the course of arthritis. The PTA external fixator is used to correct the varus of the tibia through a progressive distraction.

The operation is simple, quick and minimally invasive.

Indication

Correction of the varus deformity of the tibia and valgus deformity of the femur.

Features

Sterile kit inclusive of body of the fixator, clamps and screws.

Integrated millimetric compression and distraction unit (from 0 mm to 40 mm).

Material: Aluminium alloy 7012.

Clinical Advantages

Precise and gradual correction

Through the use of the compression and distraction unit it is possible to gradually achieve the level of correction desired (1 full rotation, corresponds to 2 mm, half a rotation corresponds to 1 mm).

Does not create complications for future prosthesis

An osteotomy performed below the tibial tubercle does not cause the lowering of the patella and thereby leaves the anatomical structures unaltered.

Simple and quick application

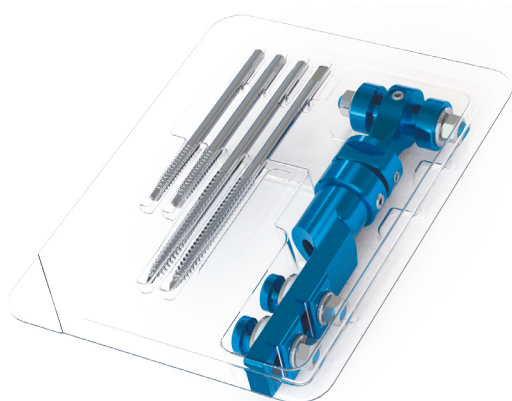
The guide block allows the user to choose the positioning of the screws without the use of x-rays.

Early weight bearing

Short operation and short hospital stay

Removal can be done in clinic

Kit PTA



Description	Qty
PTA fixator with clamps	1
Cancellous screw Ø 6.0 mm L 40 mm, thread 65 mm	2
Cortical screw Ø 6.0 mm L 100 mm, thread 40 mm	2

Key surgical steps



With the knee in flexion at 50°, insert a Ø 1.6 mm wire in the joint surface and proceed until the spine of the tibia.



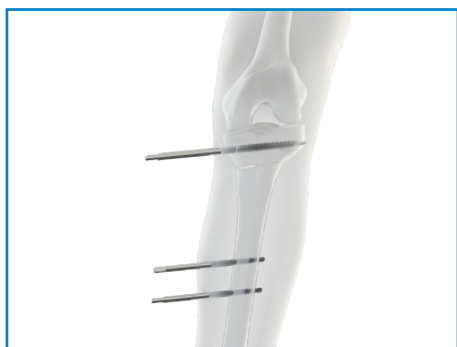
Apply the guide block into the wire previously inserted. Proceed with the insertion of the screws ensuring that they are inserted medially on the frontal plane.

Insert the screws in the following order:

- proximal cancellous screw
- cortical screw in the most distal hole
- insert the remaining two screws



When inserting screws, use a power tool to go past the first cortex and then proceed by using the T handle until you go past the second cortex.



Perform the osteotomy using an oscillating saw and an osteotome. Pay close attention not to break the lateral cortex.



Remove the integrated screws in the proximal part of the fixator.



Apply the external fixator.
Secure the screw clamps using the 12 mm T-wrench.



Loosen all the integrated screws in the central part of the fixator by using the Hexagonal 3 mm screwdriver.



Perform the distraction by using the flat wrench and check the opening wedge of the osteotomy.
Close the compression and distraction unit and tighten all the integrated screws in the external fixator.

Postoperative management

The patient is supplied with a 3 mm hexagonal wrench and a 23 mm flat wrench for the following postoperative management.

One rotation of the compression and distraction unit corresponds to a 2 mm distraction, half a rotation corresponds to a 1 mm distraction.

1 mm of distraction of the external fixator corresponds to approximately a deformity correction of 0.7°.

For the first 10 days distract half a rotation a day, for the remaining days distract half a rotation every second day. Once the correction is achieved, keep the fixator for at least 25 more days.

Sterilization

PTA is supplied sterile.

For instruments, we recommend sterilization in autoclave using saturated steam and following these parameters:

TEMPERATURE: 134°

EXPOSURE: 10 min

INSTRUMENTATION*

Item No.	Description
5000715	PTA complete instrument tray
Components:	
5000705	Guide block for screw positioning
5000602	T-Wrench for Ø 6.0 mm screws
5000121	T-Wrench 12 mm
5000124	Hexagonal screwdriver 3 mm
5000708	Flat wrench 23 mm for PTA
5000714	PTA sterilization tray (empty)

* Implantable and sterile devices are covered by CE 1936 mark, non-sterile reusable instruments are covered by the CE mark.



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