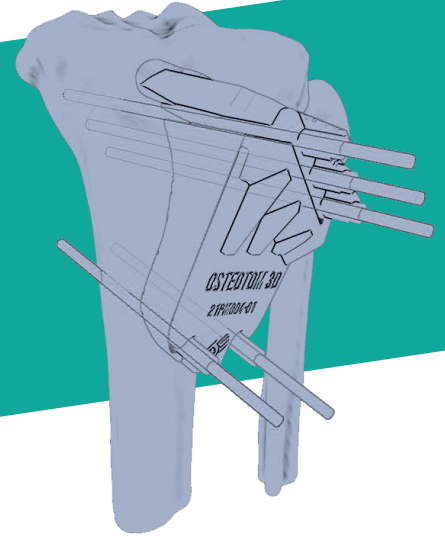


Valgus-derotational high tibial osteotomy

Knee replacement (arthroplasty) is the most commonly used surgery for the treatment of knee osteoarthritis.

However, **tibial osteotomies** can delay, or even avoid, arthroplasty. The most common ones correct genu valgum or genu varum, but when either of these two appears in combination with rotation, a 3D osteotomy needs to be performed. This means correcting the deformity in the three planes of space **in a single surgical procedure**, by defining an oblique osteotomy plane.

TOM JIG® T3 is the first 3D surgical guide system that allows this type of surgery to be performed quickly and accurately.



Surgeon	Dr. Vicenta Iglesia Cabaneiro
Hospital	Complejo Asistencial Universitario de León (Spain)
Patient	56-year-old woman who presented a pathology which combined varus and tibial rotation
Pathology	Genu Varo 8,6°. Tibial rotation 40° in the right inferior extremity
Treatment	High tibial osteotomy. 12° valguzation and 15° derotation
System used	TOM JIG® T3 : Anatomical biomodel and personalized surgical guide

TOM JIG® T3

Personalized surgical guide for valgus-derotational high tibial osteotomy

Surgical planning

- TOM JIG® T3** surgical guide system is requested under a virtual prescription based on 2D CT images
- DIGITAL ANATOMICS' software is used to calculate the oblique osteotomy plane to obtain the results required by the surgeon
- The 3D anatomical model is made
- Personalized surgical guide is designed. Finally, the biomodel and the guide are manufactured via 3D printing

Surgical process

The objective of the osteotomy is to achieve optimal repositioning of the tibia in order to reduce patient's pain and recover daily activities as soon as possible

TOM JIG® T3 system makes it possible in a precise, efficient way.



Performance

The surgery was successful. In the postoperative control, it was already possible to appreciate the good correction achieved, allowing a better mobility of the patient in a few days. Conclusions are that using a **TOM JIG® T3** surgical guide system facilitated surgery execution, increasing precision, minimizing the risk of neurovascular damages, shortening operating room time and reducing the time of exposure to X-ray radiation.



Information about the device. Custom made Medical Device: Device made to be used on a patient by a practitioner for the surgical treatment of a pathology, being an invasive surgical product, transient use class Iia. Rule 6, Annex VIII, MDR.