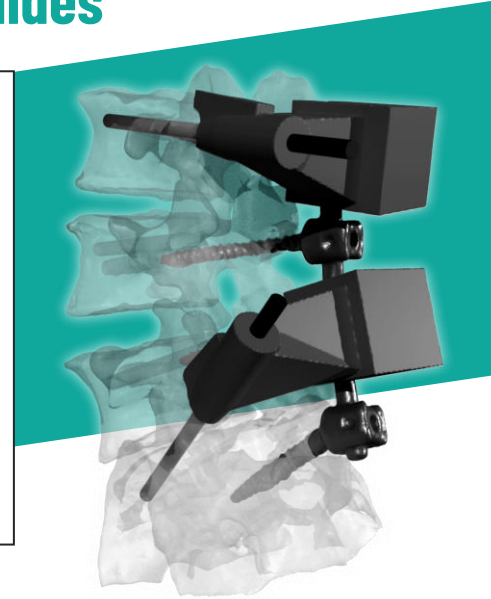


Malposition of the left side pedicle screws. Replacement using 3D guides

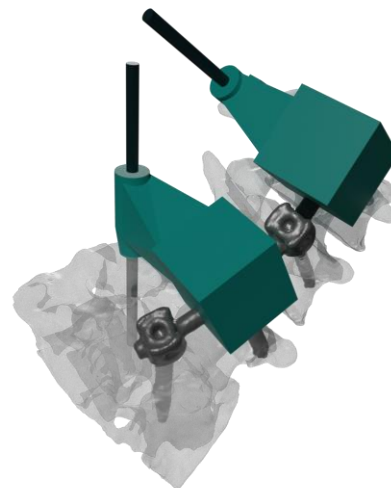
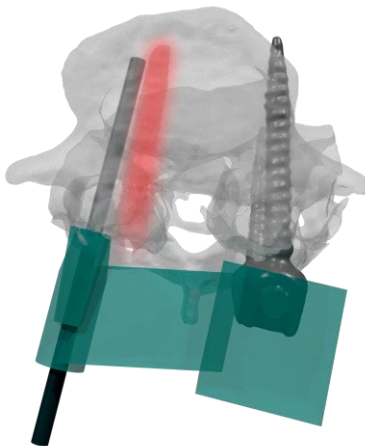
Lumbar degenerative disease is a term used by physicians to describe the natural degeneration of the lumbar spine overtime.

It includes conditions such as **spondylosis** (degeneration of the spinal discs as in osteoarthritis), **spinal stenosis** (narrowing of the spinal canal and the openings through which nerve roots exit) and **spondylolisthesis** (forward sliding of the vertebrae).

In those cases where surgery is required, the use of **TOR JIG® S** system enables an easy and fast pedicle screws placement.



Surgeon	Dr. Antonio Luis Mostaza Saavedra
Hospital	Complejo Asistencial Universitario de León
Patient	Woman with canal stenosis and multilevel spondyloarthritis, decompression and transpedicular arthrodesis L3-S1. She presented with sciatica and excruciating pain in her left lower extremity
Pathology	Malposition of left side pedicle screws
Treatment	Relocation and screws replacement using guides L3-S1
System used	TOR JIG® S : Anatomical biomodel and 4 personalized replacement surgical guides



TOR JIG® S

Personalized surgical guides system for pedicle screws placement

Surgical planning

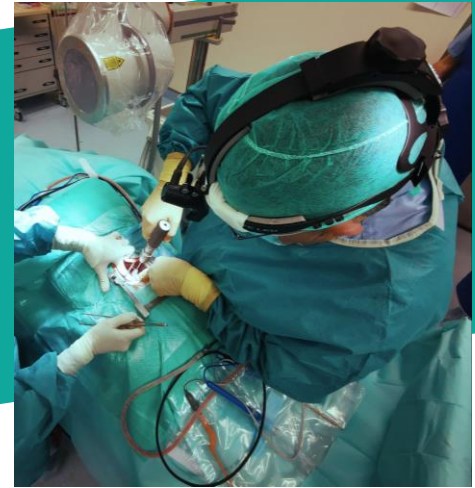
- Screws position and orientation are marked according to the surgeon's prescription.
- 3D anatomical model is made.
- Personalized surgical guides are designed for each case. Finally, the biomodel and the guides are 3D printed.

Surgical process

In the CT scan after a previous surgery, it was identified that several pedicle screws on the left side were not correctly positioned, so it was decided to perform a new surgery to replace them.

In order to ensure that this new intervention is successful, the decision is made to use **TOR JIG® S**.

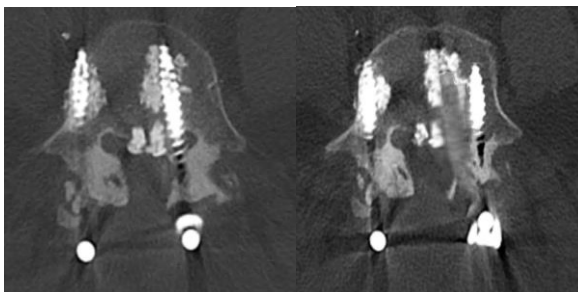
In these cases, surgical guides are simply snapped into place and are perfectly positioned when resting on the opposite side screw



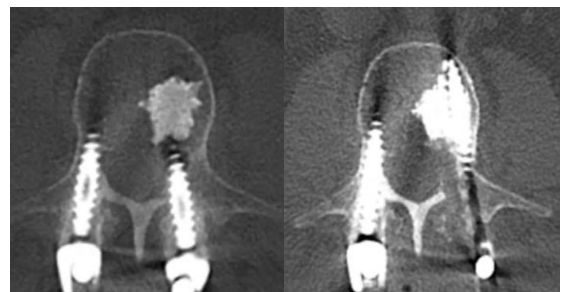
Performance

The use of guides in cases of reintervention is essential. In a replacement, it is sometimes necessary to mark an unusual drilling position and personalized surgical guides allow the screws to be placed more securely in the prescribed location and orientation. .

The surgery was a complete success. The patient confirmed that the pain had completely disappeared.



Preoperative CT



Postoperative monitoring

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.