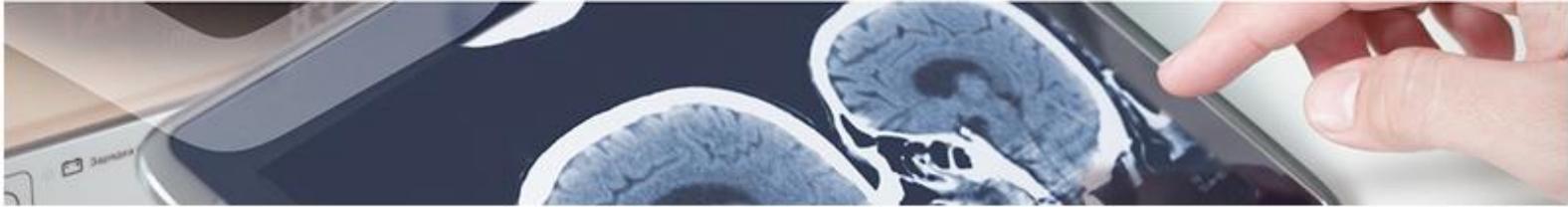


## Medical Devices

### New system of pelvis external fixation

A Research Group from the Andalusian Public Health System (SSPA *as per its Spanish acronyms*) and researches from the University of Malaga (UMA), have developed a new system of external fixation for pelvis fractures.



### Description

The external fixation is used in different types of unstable pelvis fractures, it is a fast application method and it is slightly invasive. Many pelvis fractures represent a complex clinical and therapeutic problem, especially those in which it is registered fractured beckenring because of the haemorrhagic problem involved. The external fixation is carried out by means of some pins inserted in the pelvis bone, called Schanz pins, which stabilize the fractured pelvis. An external fixator has been recently used and this consist on a curved elastic bar to which the pins are inserted in the pelvis bone, achieving better results than the traditional fixators. However, in order to use this fixator, it is necessary to open the arms of the elastic bar, forcing its stress.

The new system developed consist on a tensor specially designed for the opening of an curved elastic external fixator, being the first device developed to carry out these operations as well as a modification in the external fixator, making it dismantled, otherwise, it may be excessively large which might be an inconvenience, thus, being very uncomfortable for the patient and making the mobilization more difficult. The tensor enables the movement control of the ends of the mentioned fixator, achieving the regulation of the opening and enabling to apply the strength easier. Once the bar is tighten, this shall be fit with the pins, fixing it with the kneecap, and following, the tensor is removed. The external fixator whose ends might be dismantled, enables the use of the ends to tight the fixator, and once this is tighten, the ends are dismantled in order to improve the patient's comfort and mobility.

Among the advantages offered by this system compared with the current fixation system, it is worthy to mention the followings:

1. It makes possible to open the arms of the pelvis external fixator, keeping a greater control in the opening and in the strength to be applied to the mentioned fixator.
2. It enables the performance of a mixed pelvis stabilization (anterior and posterior), improving significantly the posterior fixation which is complete with this system, making impossible any pelvis displacement.
3. The improvement in the stabilization also leads to a greater assistance in the reduction of osseous and venous haemorrhage.
4. The use of the external fixator, whose ends are removed once the stabilization has been carried out, makes the external fixation more comfortable for the patients, thus, making their mobilization easier.



### Intellectual Property

This technology is protected by patent.



### Aims

We are looking for a partner interested in a license and/or a collaboration agreement to further develop and exploit this innovative technology.



### Advantages



### Classification

Area: Medical device