



Medical devices

Dismountable clamp for bone fixation

A researcher at the Biomedical Research Institute of Malaga (IBIMA) and the Andalusian Health Service (SAS) has developed a new staple for the fixation of a bone structure.



Description

Currently, bone fragment fracture repair is performed using orthopedic staples that can be rigid or prestressable. To fix the bone during surgery, the surgeon drills the two bone fragments, and then inserts the legs of the staple into the holes. Staples of this type can be of two types: conventional rigid staples, which have a permanent rigid shape that does not create a lasting compression on the two bone fragments; and prestressable or elastic staples, which offer a more lasting compression between bones or bone fragments.

The main drawback of these types of staples, both rigid and elastic, is that the position and shape of the legs is fixed, which reduces the specific field of application of each model.

The newly designed medical device consists of a staple in which the legs can be assembled or disassembled from a central element according to different configurations, so that it can adapt its structure and number to different applications.

These configurations give the staples for fixation an ability to arrange the legs according to any orientation, as well as provide greater flexibility in the distal stretch of the legs. Thus, this device solves the problems observed with conventional clamps.



Advantages

- Allows **treatment of bone fractures in a manner adapted to the anatomy of each patient**. The professional can choose both the structure and the number of legs of each clamp.



Intellectual Property

This technology is protected by a national patent application with possibility of international extension.



Aims

The researcher is looking for partnership and/or license agreement for the development and exploitation of the technology.



Classification

Area: Medical devices

Pathology: Musculoskeletal disorders



[Orthopedic surgery and traumatology \(IBIMA-TECH\)](#)