



## Medical Devices

### Bone flap fixation device

A research group from the Andalusian Public Health System (SSPA) has developed a bone fixation device that provides freedom of movement to the bone flap, thereby relieving intracranial pressure in the case of an oedema.



#### Description

In a craniotomy, the bone flap can be attached to the rest of the skull by various means and devices, some of which may be absorbable: threads, wires, microplates and screws, self-anchoring devices, hydroxyapatite, etc. These traditional fixing systems are normally rigid – in other words, they involve attaching the bone flap to the skull in a fixed and static manner.

The new device developed by this research group solves the aforesaid problems with the use of an extendable –either flexible or telescopic – component featuring the means to connect the edge of the bone flap with the edge of the skull. The design enables the bone flap to shift in response to excessive intracranial pressure.

This device has been tested in patients at Spain's Hospital Torrecárdenas, in Almería, with very positive results.



#### Advantages

1. The movement of the bone flap increases the intracranial volume, thereby relieving intracranial pressure.
2. The device enables the surgeon to lock it into its retracted position once the oedema has subsided, without the need of surgical intervention.
3. Ease of use.



#### 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.



#### Classification

Area: Medical device

Pathology: Musculoskeletal disorders