Exoskeleton to improve surgeon ergonomics

Available to license: an exoskeleton to improve surgeon ergonomics in minimally invasive surgery and interventional radiology procedures.

Researchers from the Cantabrian Health Service and the University of Cantabria have developed an exoskeleton for improving the ergonomics of surgeons during surgical interventions that require manipulation of surgical instruments in prolonged static positions.

Exoskeleton for forearm support

Development of minimally invasive surgery has gone hand in hand with technological advancement, incorporating special surgical instruments into the operating room. Manipulation of this technology by surgeons imply the adoption of forced and uncomfortable postures during surgical interventions.
The present exoskeleton improves the ergonomics of surgeons during minimally invasive surgery (MIS) interventions.
Its use helps to mitigate the physical fatigue of the surgeon during operations and reduces or eliminates various musculoskeletal injuries that may arise in the medium and/or long term in surgeons due to the adoption of forced and static postures for long periods of time.

Competitive advantages

The main competitive advantages of the device are:

- Ergonomic.
- Reduces surgeon fatigue.
- Reduces the risk of musculoskeletal injuries for the surgeon.
- Adapted to the anatomy of the surgeon.
- Versatile. Allows the use of the arm with support or free

Supporting Data

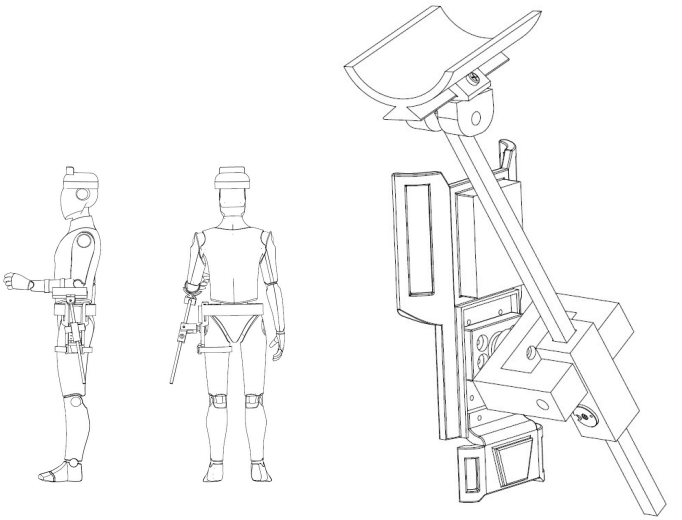
An exoskeleton has been built for user forearm support, configured to be adjustable on the torso, hip, or thigh.

Market insight

This exoskeleton is of great interest to surgeons who have to manipulate surgical instruments with precision and during prolonged interventions.

Patent Protection

This device has been protected as Utility Model granted by OEPM with Ref. **ES1317816U**. IDIVAL would like to talk to companies interested in its license and commercialization.



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