

**Rotation of a surgeon belonging to the SNFCP at the General Surgery Service of the Hospital General Universitario de Elche:
HUGO ROBOTIC SURGERY AND PREHABILITATION-ERAS.**



Hospital Universitario de Elche, Alicante- Spain

Adress: Camino del Almazara, 11
03203 Elche – Alicante

Turory: Dr. Antonio Arroyo Sebastian, Head of Colorectal Surgery Section

arroyocir@yahoo.es



The rotation of the SNFCP professional in the General Surgery Department of the Hospital General Universitario de Elche will be based on 2 fundamental pillars:

1. Experience in **robotic surgery** with **the Hugo™ robotic platform from Medtronic**.
2. **Prehabilitation programme** for surgical patients in General Surgery.

Experience in robotic surgery with Medtronic's Hugo™ robotic platform.

The General Surgery Department of the Hospital General Universitario de Elche is one of the first centres in Europe and Spain with Medtronic's Hugo™ robotic platform, an innovative tool designed to revolutionise general surgery and offer surgeons greater precision and control during surgical procedures. Hugo™ combines cutting-edge robotic technology with Medtronic's clinical expertise to improve surgical outcomes and patient recovery.

This platform offers a number of significant advantages for general surgery. First, it allows surgeons to perform procedures with extreme precision thanks to its articulating robotic arms and its ability to eliminate human tremors, which is especially valuable in delicate and complex surgeries.

Hugo™ also provides surgeons with high-definition 3D vision, making it easier to identify important anatomical structures and make decisions in real time. This improves the safety and efficiency of procedures.

In addition, the Medtronic Hugo™ platform is designed with patient comfort in mind. Its ergonomic design allows for faster recovery with less pain, which can reduce hospital stay and speed return to normal life.

In short, Medtronic's Hugo™ robotic platform is revolutionising general surgery by providing surgeons with a cutting-edge tool that improves accuracy, safety and patient comfort. With its combination of advanced technology and clinical expertise, Hugo™ is paving the way for a brighter future in surgery.

The modularity of Medtronic's Hugo™ platform is another key aspect that brings significant value to general surgery. This feature allows surgeons to adapt the platform to the specific needs of each procedure and personal preferences, making it a versatile and customisable tool.

Modularity is reflected in the ability to easily interchange robotic arm units, meaning the platform can be used in a wide variety of surgical procedures, from abdominal surgery to thoracic surgery and beyond. This reduces the need to purchase multiple robotic systems for different applications, resulting in a more efficient investment for hospitals and surgical centres.

In addition, Medtronic's Hugo™ platform adapts to the surgeon's preferences and needs. The user interface is highly intuitive and customisable, allowing each practitioner to adjust the platform's configuration according to their individual working style and preferences, thus improving comfort and efficiency during surgery.

In short, the modularity of the Hugo™ platform not only extends its usefulness in a variety of procedures, but also adapts to the surgeon's personality and working style, making it an exceptionally versatile and efficient tool in the field of general surgery.

Prehabilitation Programme-ERAS for General Surgery surgical patients.

The aim of prehabilitation programmes (PP) is to optimise the patient during the period between the time of diagnosis and the surgical procedure in order to reduce the complications derived from surgery.

Initially, prehabilitation has been based on a tri-modal conception with three fundamental pillars: improvement in physical condition, optimisation of the nutritional situation and cognitive intervention to reduce stress and anxiety, but recent studies have shown benefits when applying other measures, such as smoking cessation, preoperative improvement of anaemia or pharmacological reconciliation, so it would be more correct to speak of prehabilitation as a multimodal strategy.

Each of these elements, which make up the PP package, may not be of major clinical significance on their own, but when taken together they have been shown to significantly improve patients' postoperative outcomes and are therefore considered to have a synergistic effect on each other.

Following in the footsteps of multimodal rehabilitation with Enhanced Recovery After Surgery (ERAS) protocols, PPs represent a revolution in the perception of patients' preparation for surgical treatment.

Surgical prehabilitation seeks to transform the paradigm of surgical care from a reactive to a proactive approach, with the goal of improving postoperative outcomes, reducing complications and accelerating patient recovery. It is important to note that the specific approach may vary according to individual needs and the type of surgery. Healthcare professionals, including surgeons, anaesthesiologists and physiotherapists, can collaborate to design personalised prehabilitation plans for each patient.

Detailed organisation chart

****Monday: Orientation and Knowledge of the Hospital Environment. Robotic Surgery Operating Room****

- 8:00-9:00h: Welcome and orientation to the hospital. Meeting with the general surgery team to meet colleagues and discuss the rotation programme.
- 9:00-14:00h: Active participation in robotic surgery procedures.
- 14:00-15:00h: Review session of recorded cases with DS1 platform.
- 15:00-20h: Hugo robotic simulator.

****Tuesday: Pre-rehabilitation Consultation**.**

- 8:00- 13:00 h: Observation and participation in pre-rehabilitation consultations. Practical learning of morpho-functional assessment (dynamometer, impedance, CAT scan, 6-minute test,...) and App-prehabilitation programme exercise-nutrition-psychology).
- 13:00- 15:00h: Surgical case review session and discussion with the team.
- 15:00-20h: Hugo robotic simulator.

****Wednesday: Robotic Surgery Operating Room**.**

- 8:00-14:00h: Active participation in robotic surgery procedures.
- 14:00-15:00h: Postoperative case review and discussion session.
- 15:00-20h: Hugo robotic simulator.

****Thursday: Pre-rehabilitation Consultation**.**

- 8:00 - 13:00 h: Observation and participation in prehabilitation consultations.
- 13:00- 14:00 h: Academic session with the surgery department.
- 15:00-20h: Hugo robotic simulator.

****Friday: Academic Sessions and Evaluation**.**

- 8:00- 11:00h: Academic sessions and review of case studies.
- 11:00- 13:00 h: Professional development, review of learning objectives and planning for next week.
- 13:00-15:00 h: Working lunch. Evaluation of progress and feedback.

This programme provides a balance between observation, active participation, academic sessions and professional development to ensure a comprehensive and enriching experience during the foreign surgeon's rotation at the General Surgery Department of the General University Hospital of Elche.