LAPIS

Minimally invasive intraoperative navigation system for abdominal surgery

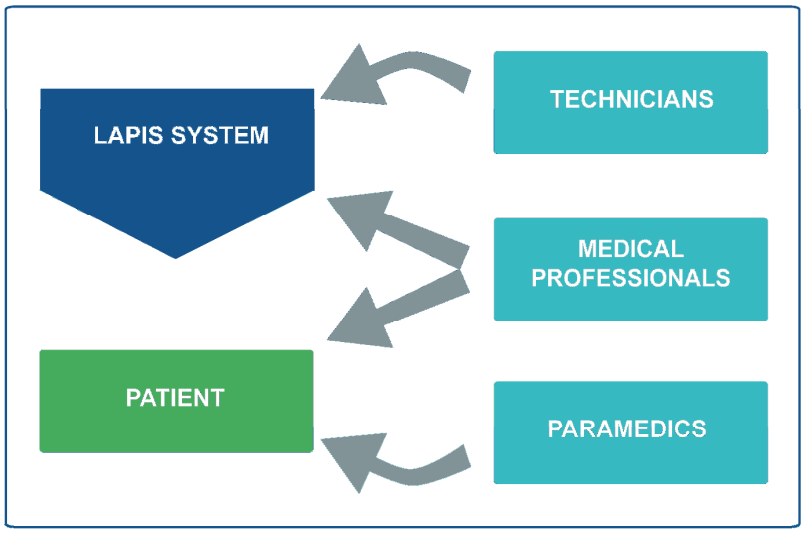
Goal

Study, development and testing of a three-dimensional navigation system for minimally invasive abdominal surgery.

Project phases

- 1: Study of the minimally invasive intraoperative navigation system for abdominal surgery
- 2: Making of a prototype
- 3: Laboratory testing (clinical trials)
- 4: Spreading of results achieved and collaborative approach used

New approach to technological innovation



Model of interaction of people involved in surgical procedure with LAPIS

Duration

12 months (June 2013- May 2014)

Progetto cofinanziato dalla Regione Puglia nell'ambito del bando Apulian ICT Living Labs
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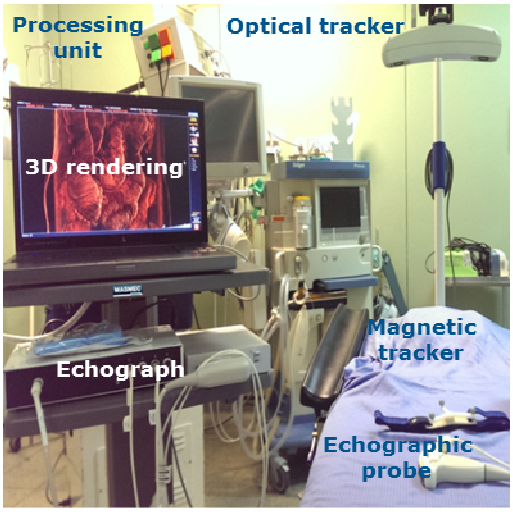
Results

- Making of a prototype of the navigation system based on merging of CT and echographic images and on optical and magnetic tracking.
- Installation at abdominal surgery department of "Casa Sollievo della Sofferenza" Hospital.
- Testing on patients with cancer, mainly liver cancer.



Fields of application

Assisted surgical oncology and radical surgery on liver, kidneys and thorax.

Benefits

Improvement of efficacy and efficiency of surgical procedures on the abdomen through the use of an innovative technology along with traditional laparoscopic surgical techniques.

The use of a surgical navigation system can provide great benefits to patients and surgeons in terms of reduction of invasiveness, risk and surgery duration.

Partnership

MASMEC S.p.A - Modugno (BA)
coordinator

Ospedale Casa Sollievo della Sofferenza Opera Padre Pio - S.Giovanni Rotondo (FG)
end user

ISBEM Istituto Scientifico Biomedico Euro Mediterraneo - Mesagne (BR)
research institute

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