



THE USE OF PERCUTANEOUS AND INTRA ABDOMINAL RETRACTORS FOR REDUCED PORT COLONIC SURGERY



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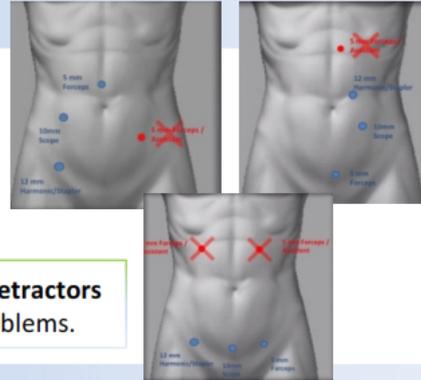
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BACKGROUND

Laparoscopic colectomies are usually performed using 4 or 5 ports in different quadrants.

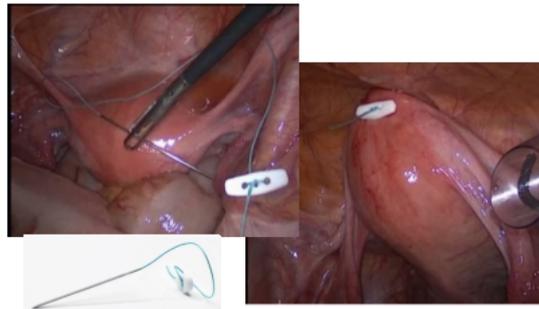
In order to further reduce surgical trauma and to improve cosmetic, “**reduced port surgery**” is becoming increasingly popular but it poses some limits mainly related to ergonomics and traction and contra-tractions.

The use of **percutaneous-** as well as **endo-retractors** may help to overcome some of these problems.



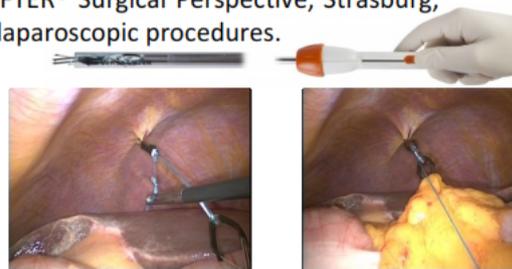
MATERIALS AND METHODS

Percutaneous retractors (T-PEA LIFTER®, Surgical Perspective, Strasbourg, France) thanks to the use of a straight needle attached a surgical suture that end with “plastic” button can be introduced through a 10 mm port and **used to lift solid organs** in particular the fundus of the uterus during anterior rectal resection.



Intra-abdominal adjustable retractors (VERSA LIFTER® Surgical Perspective, Strasbourg, France) allow **dynamic organ suspension** during laparoscopic procedures.

The device is inserted in the abdominal cavity through an existing 10-mm port using a **dedicated introducer** and it is completely repositionable and adjustable intraoperatively.



The system consists of **two clips** connected together by a 0.35 mm diameter **Teflon-coated polyester thread**.

One clip is attached to the organ to be suspended, the other one is attached to the peritoneum in the desired suspension angle, while the thread between the two anchors **adjusts the distance** after their application (60mm-115mm). Clips can be easily manipulated in the abdominal cavity during surgery with a simple grasper and **anchors can be re-placed** numerous times.

RESULTS AND CONCLUSIONS

We used these devices during **right, left and transverse colectomy** for cancer and their use was always extremely intuitive requiring a minimal learning curve. **No intra or post-operative complications** related to those devices were reported. Percutaneous and endo-retractors are helpful devices that allow the reduction of the assisting port, usually required only for traction and contra-traction during laparoscopic colectomies.