



Transumbilical herniorrhaphy

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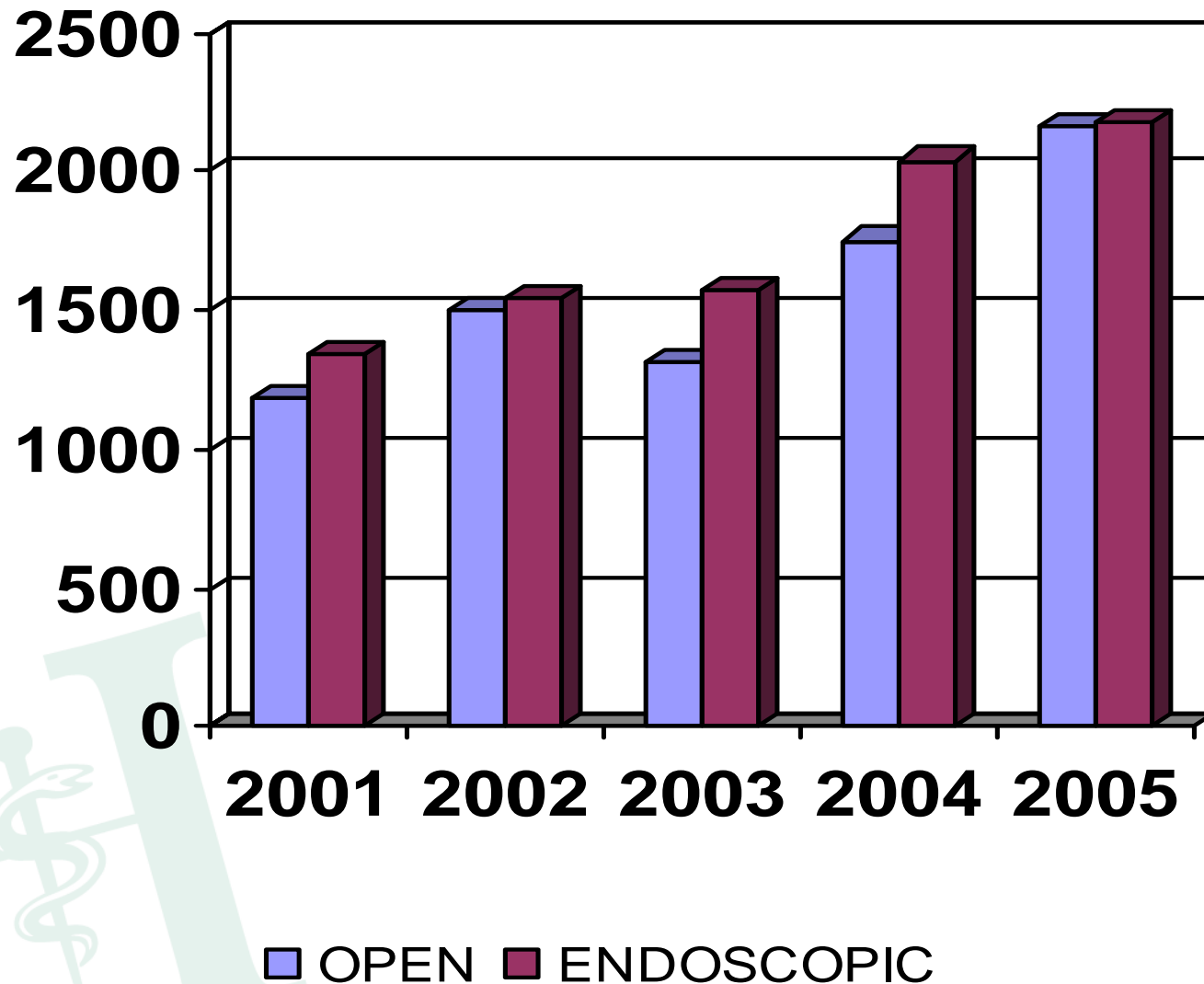


Incidence of inguinal hernias in Germany

- 200 000 operations / year
- 15% both-sided hernias
- 90% men 10% women
- 12% recurrent hernias
- 8,4% incarceration



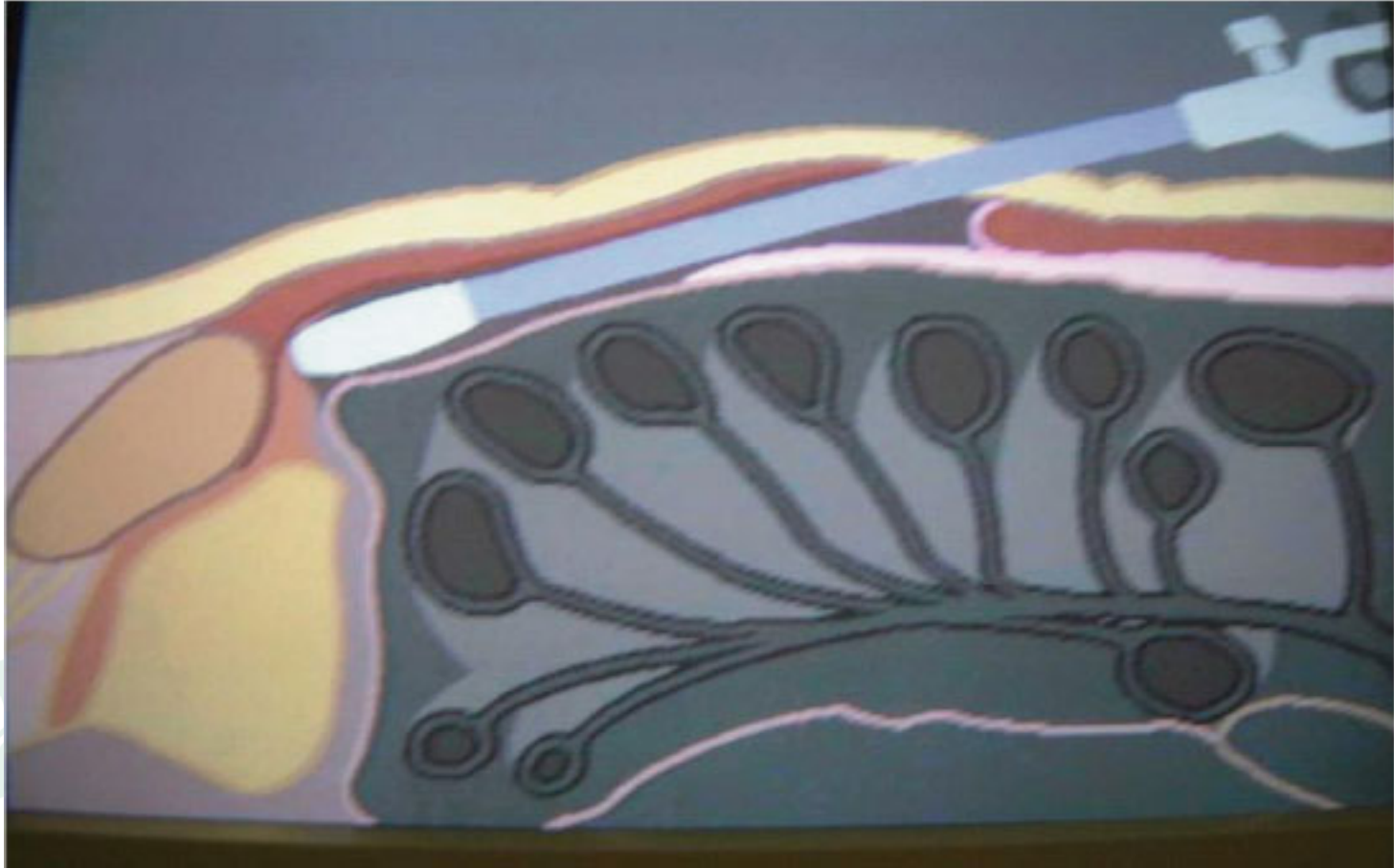
Inguinal Hernia Repair in HELIOS-Clinics



Different techniques of repair in Germany

- Endoscopic extraperitoneal repair 14%
 - Transabdominal /laparoscopic repair 13%
 - Shouldice 37%
 - Lichtenstein/Rutkow 19%
 - Bassini 5%
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- Mesh 46%
 - Endoscopic /laparoscopic 27,5%

The preperitoneal space



Influencing Factors 1: Costs

- Human resources 2,7 €/min.
- Materials
 - Endoscopic TEP 120,63€
 - Open (mesh) 127,96€



Operation time for Hernia Operations

Average operation time HELIOS endoscopic:
62 min.

TEP: 68,5 min. (39%), TAPP 59 min. (61%)

Average operation time HELIOS open:
58 min.

Average operation time HELIOS-Clinics with more than 150 endoscopic
hernia operations/year: 43 min



Influencing Factors: Medical Aspects

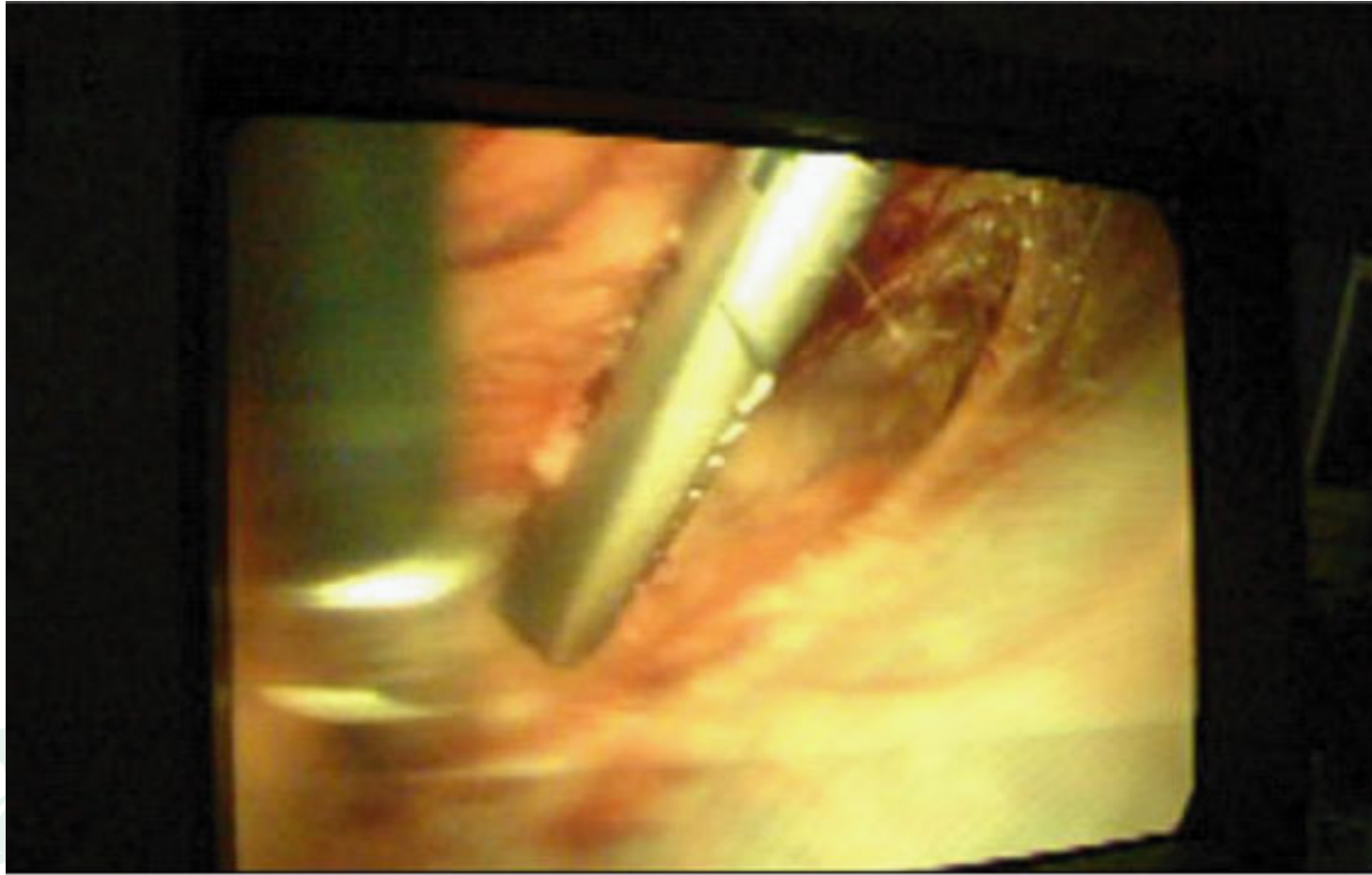
- **Number of Hernias in one Patient**
(rise of benefit in patients with a both sided hernia)
- **Teaching Operations** (endoscopic hernia operations are more complicated)
- **Capacity of Operation Theatre** (operation time)
- **Quality of the Operation / Pain / Recurrences**
- **Postoperative Recovery and Return to Normal Activity**

Schmid A, Schlumpf R.: Endoscopic repair of groin hernia - what ist evidence-based Ther Umsch. 2005 Feb;62(2):85-9.

Endoscopic extraperitoneal approach

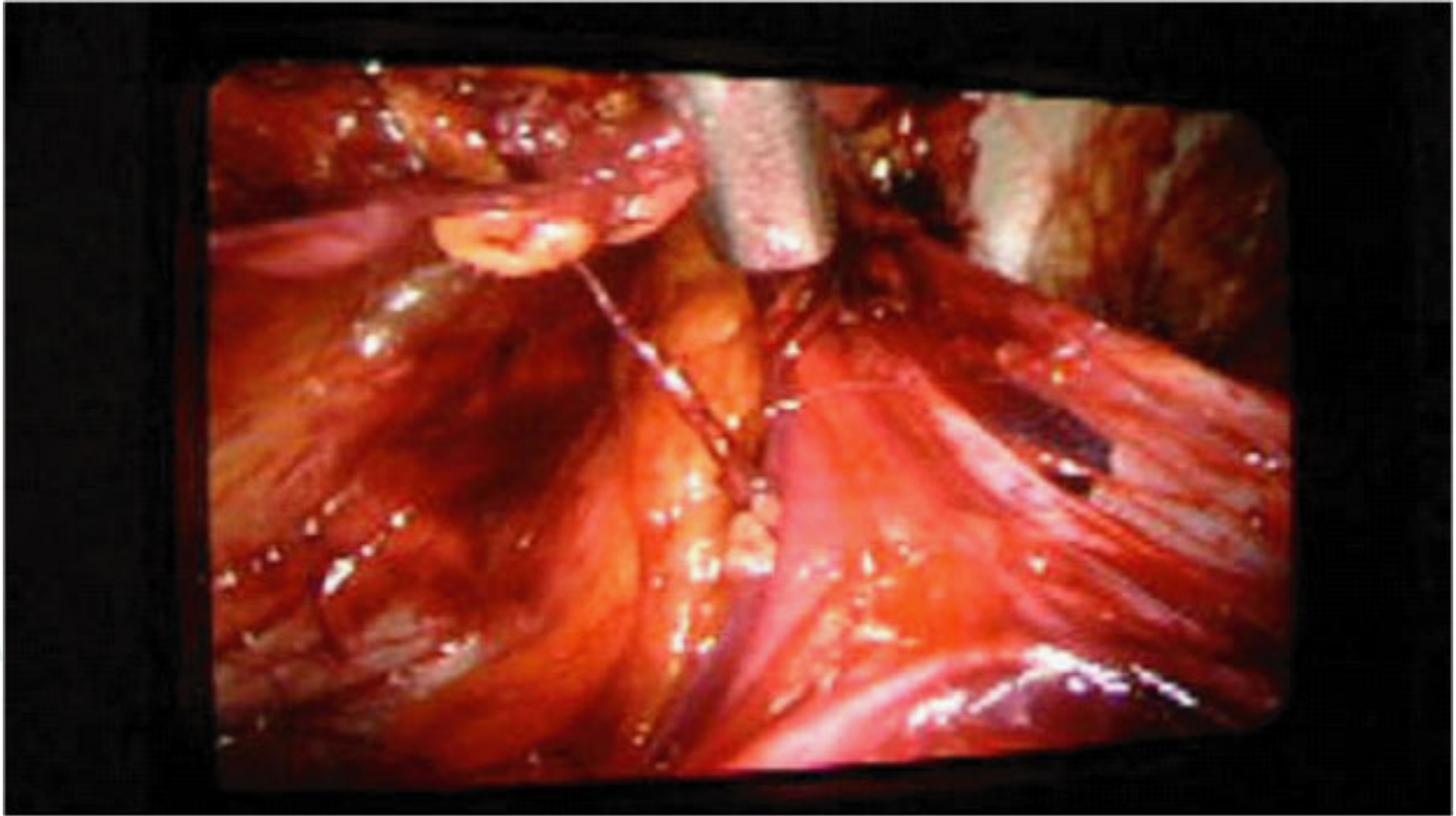


Widening of the preperitoneal space



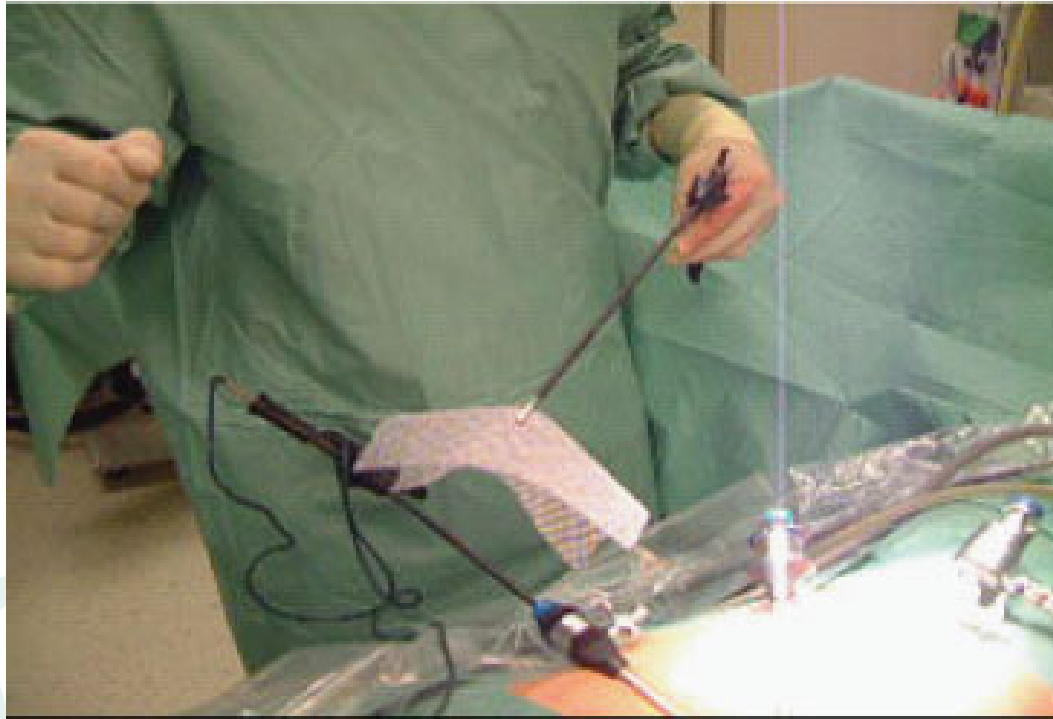
The preparation in the right layer is possible without any bleeding

Lateral dissection of the hernia sac



The view on the hernia sac is better than in the open technique

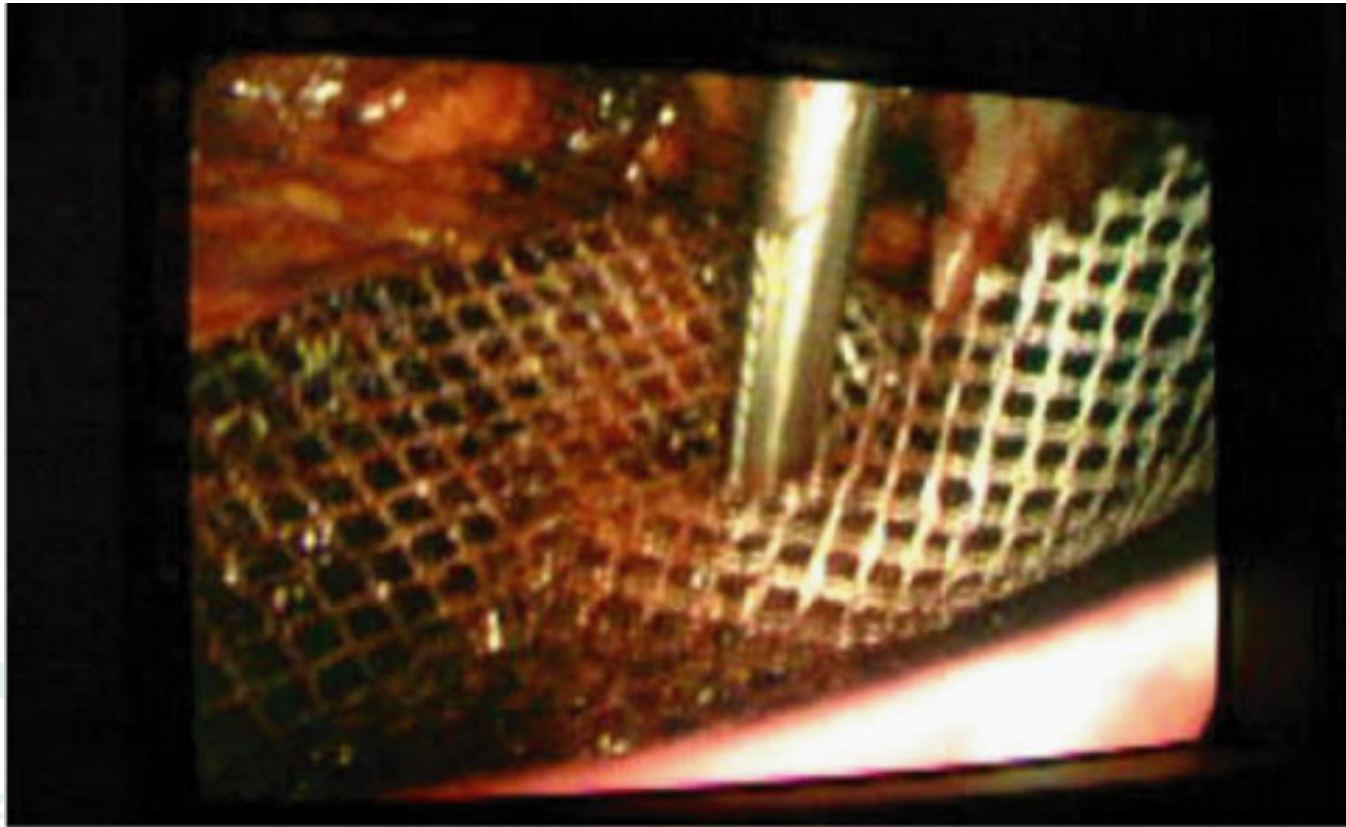
Putting in the mesh



Therefore the 10 mm trocar in the umbilicus is used.



Positioning of the mesh



The right position can be verified under visual control

Conclusion

- Offer the Different Techniques of Repair
- Quality and Patients Sufficiency Stays the most Important Factor
- Endoscopic Hernia Surgery is not more Expensive

