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SAN GIOVANNI ROTONDO  
ITALY**

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UNIVERSITE' PARIS-ILE DE FRANCE**

**C.H.U. AMBROISE PARE'  
BOULOGNE-BILLANCOURT  
FRANCE**



# **SUTURE VASCOLARI IN LAPAROSCOPIA**

**G. COLACCHIO, M. COGGIA**

# ANASTOMOSI VASCOLARI

## *CARATTERISTICHE*

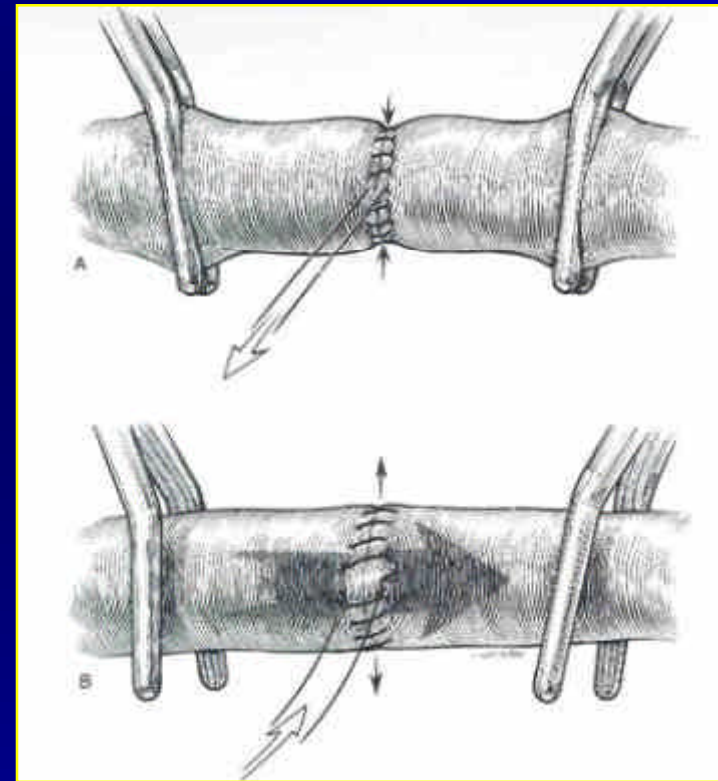
- **TRAZIONE**
- **PARETE IN TOTO**
- **CONGRUITA'**
- **TENUTA**



# ANASTOMOSI VASCOLARI

## CARATTERISTICHE

- **TRAZIONE**
- **PARETE IN TOTO**
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# ANASTOMOSI VASCOLARI

## *CARATTERISTICHE*

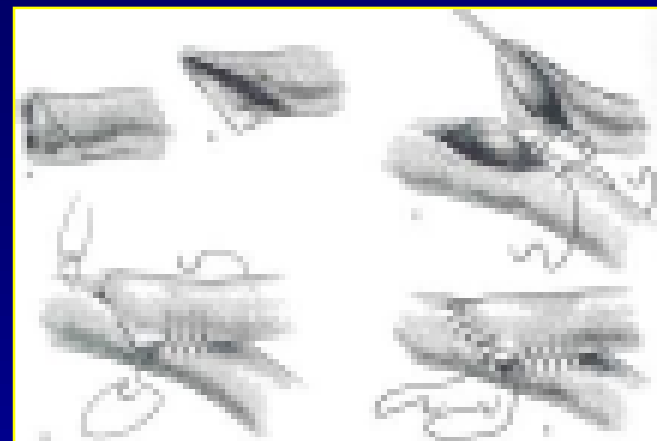
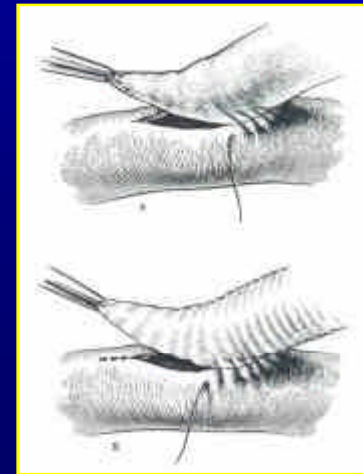
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# ANASTOMOSI VASCOLARI

## *CARATTERISTICHE*

- TRAZIONE
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## *CARATTERISTICHE*

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- **TENUTA**



# ANASTOMOSI VASCOLARI

## *MATERIALI*

- PROLENE
- PTFE



# ANASTOMOSI VASCOLARI MATERIALI

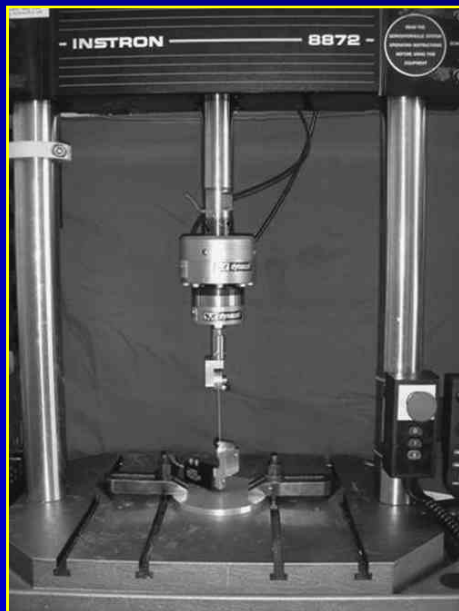


Wolters Kluwer | Lippincott  
Health | Williams & Wilkins

SURGICAL  
**Laparoscopy Endoscopy &**  
PERCUTANEOUS TECHNIQUES

• Preceded by: Surgical Laparoscopy, Endoscopy & Percutaneous Techniques (ISSN: 1051-7200)

## Suture Damage During Robot-assisted Vascular Surgery: Is It an Issue?



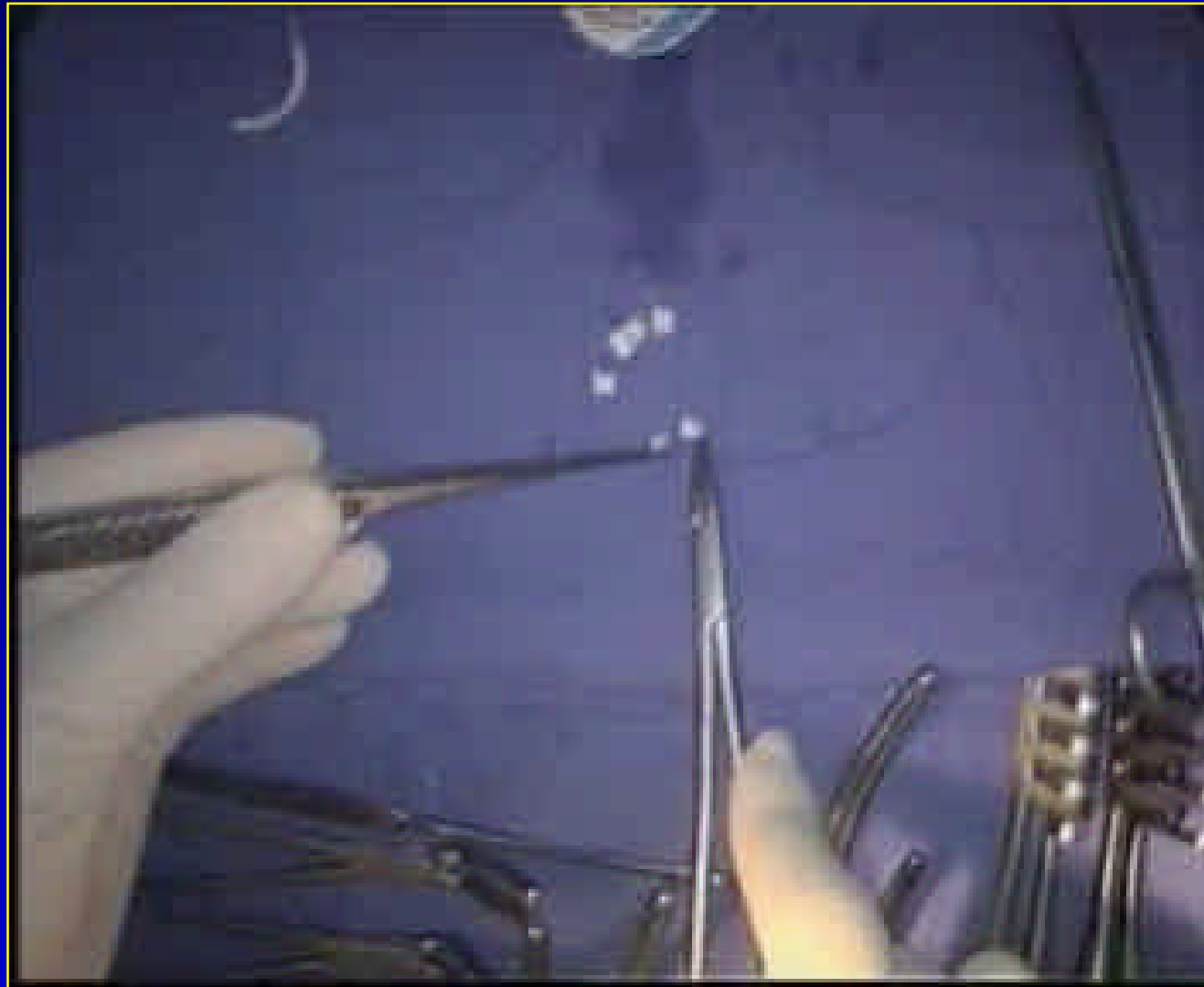
Test results showed ePTFE to be the suture material that is the least susceptible to robotic manipulation. In our opinion this is the most reliable suture to use in robot-assisted laparoscopic creation of intracorporeal vascular anastomoses.

Diks J, Nio D, Linsen MA, Rauwerda JA, Wisselink W.  
Surg Laparosc Endosc Percutan Tech. 2007 Dec;17(6):524-7.



# ANASTOMOSI VASCOLARI

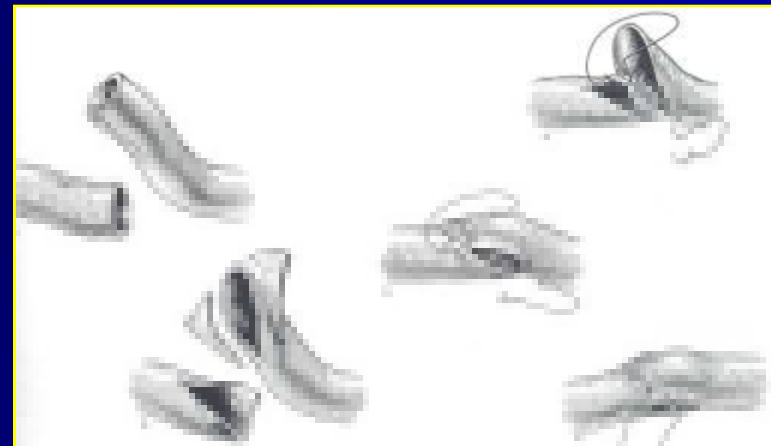
## *MATERIALI*



# ANASTOMOSI VASCOLARI

## *TECNICHE*

- **PUNTI STACCATI**
- **SOPRAGGITTO**
  - *UNICO*
  - *DUE EMISOPRAGGITTI*
  - *TRIANGOLAZIONE*



# ANASTOMOSI VASCOLARI

## TECNICHE

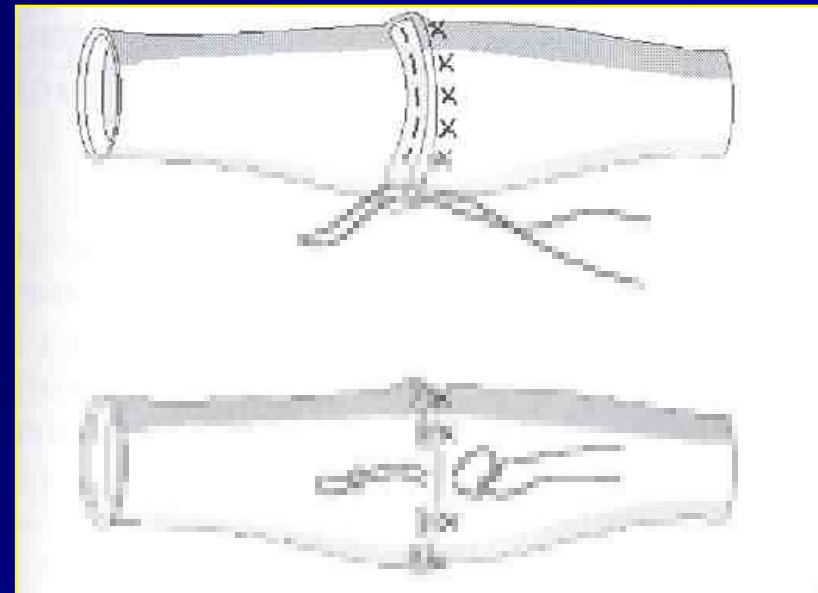
- **PUNTI STACCATI**

- **SOPRAGGITTO**

- **UNICO**

- **DUE EMISOPRAGGITTI**

- **TRIANGOLAZIONE**



# ANASTOMOSI VASCOLARI

## TECNICHE

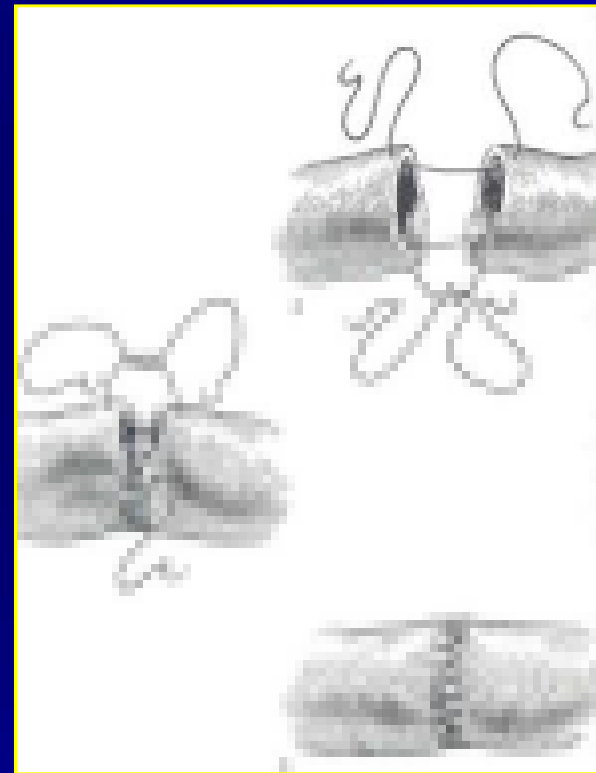
- **PUNTI STACCATI**

- **SOPRAGGITTO**

- **UNICO**

- **DUE EMISOPRAGGITTI**

- **TRIANGOLAZIONE**



# ANASTOMOSI VASCOLARI

## TECNICHE

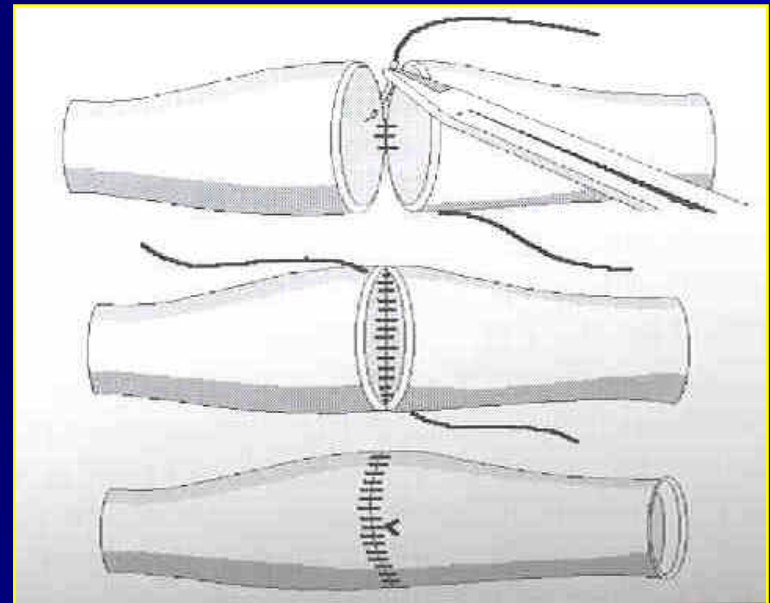
- **PUNTI STACCATI**

- **SOPRAGGITTO**

- **UNICO**

- **DUE EMISOPRAGGITTI**

- **TRIANGOLAZIONE**



# ANASTOMOSI VASCOLARI

## TECNICHE

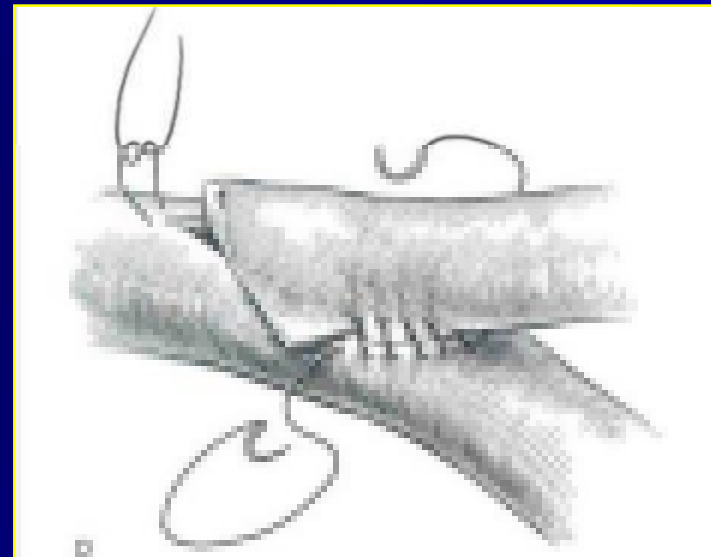
- **PUNTI STACCATI**

- **SOPRAGGITTO**

- **UNICO**

- **DUE EMISOPRAGGITTI**

- **TRIANGOLAZIONE**



# Right lateral decubitus

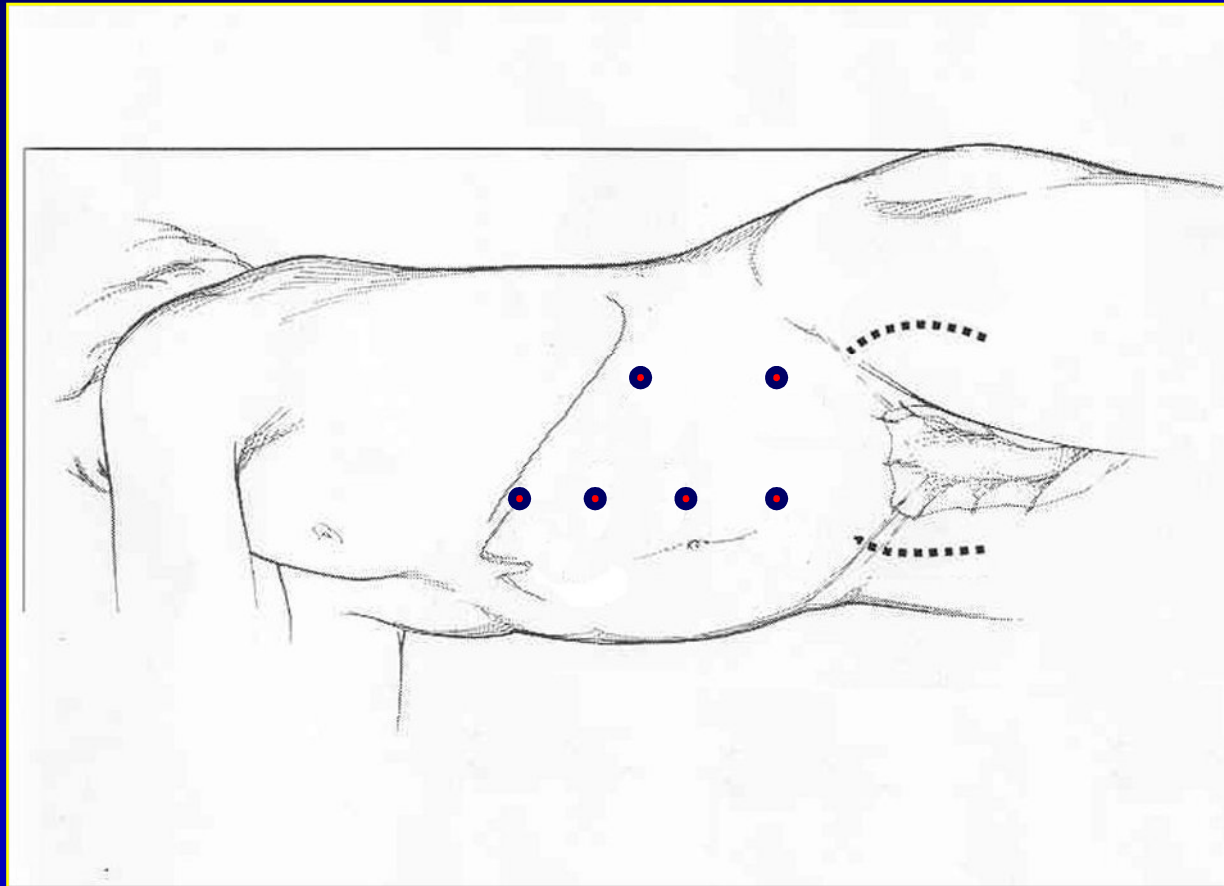


# Right Lateral Decubitus

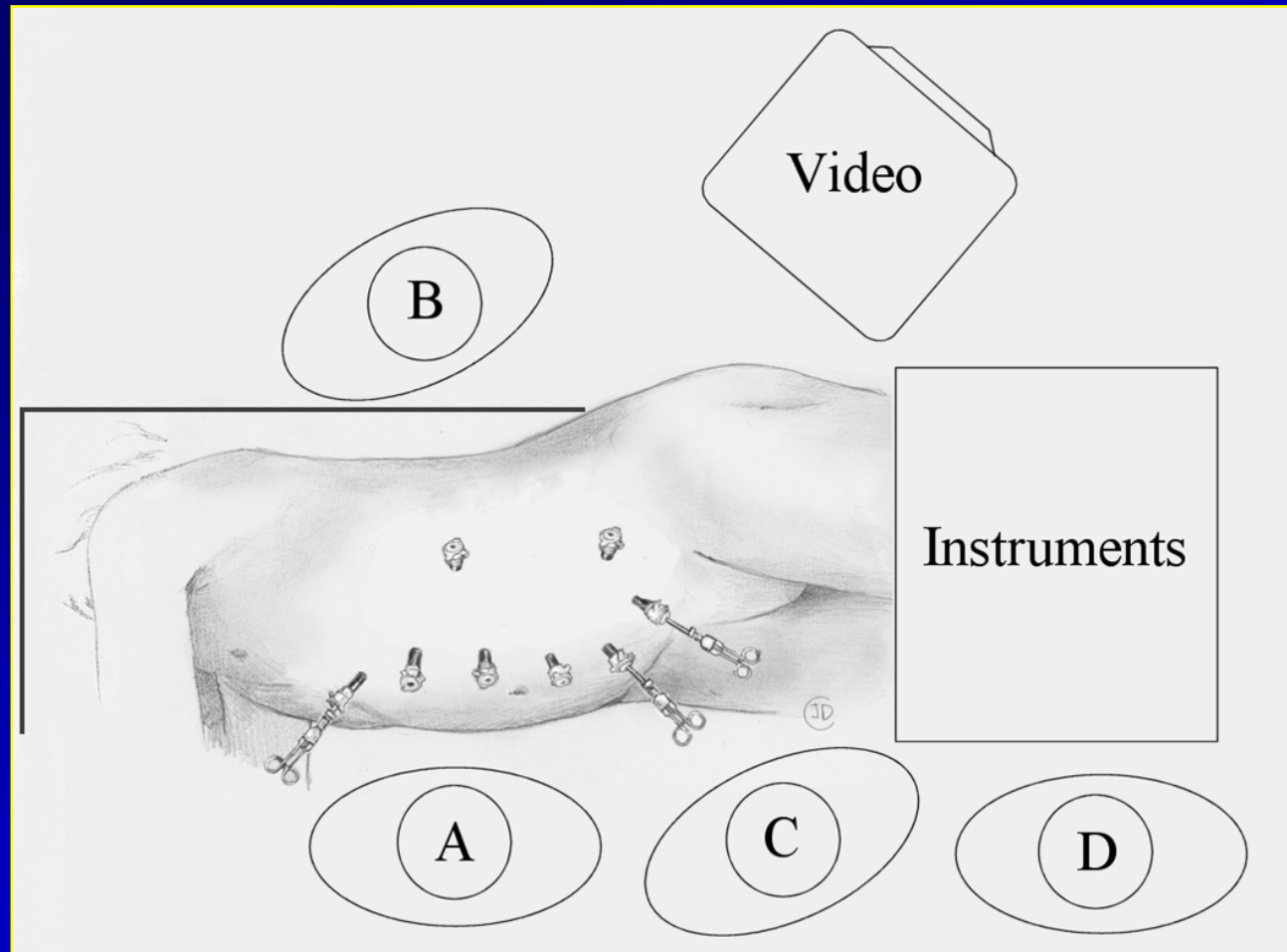




# Positioning of trocars

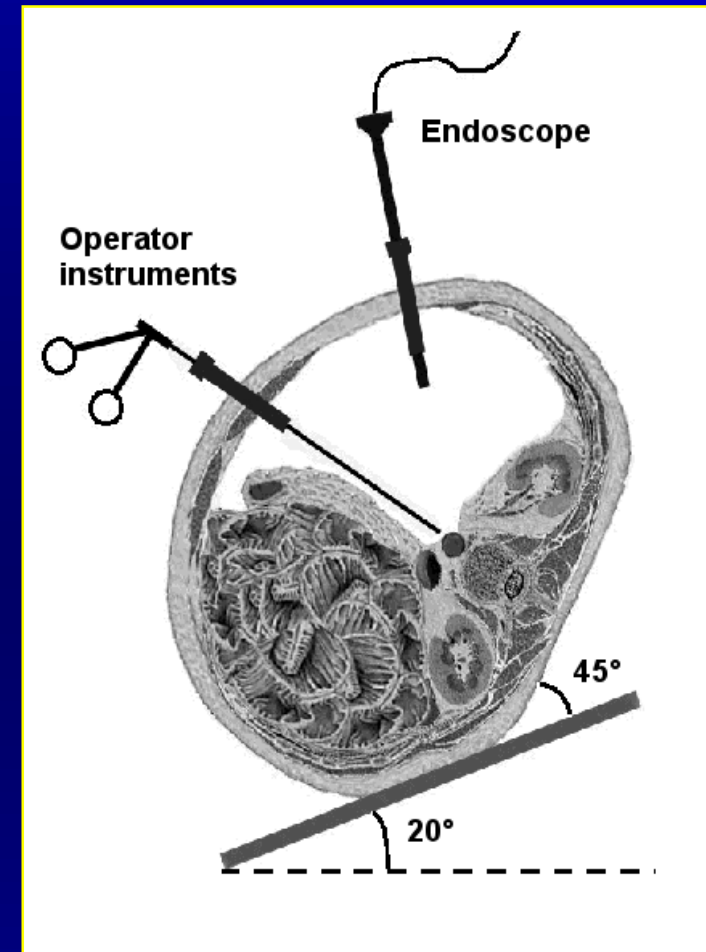


# Operator facing the patient's abdomen

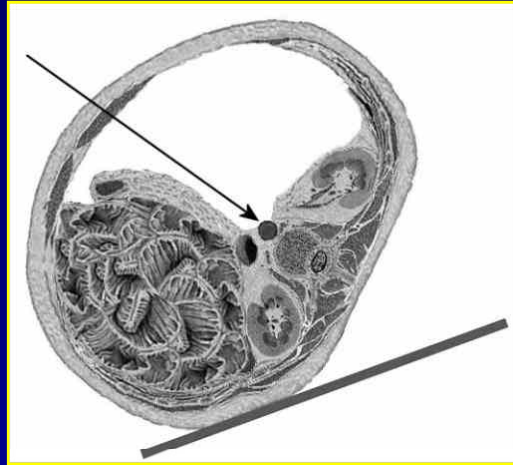


# Operator facing the patient's abdomen

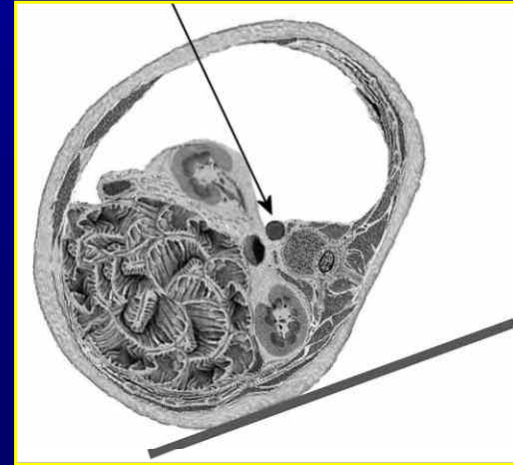
- Orientation of surgical instruments
- Control of the right side of the aorta
- Large working space



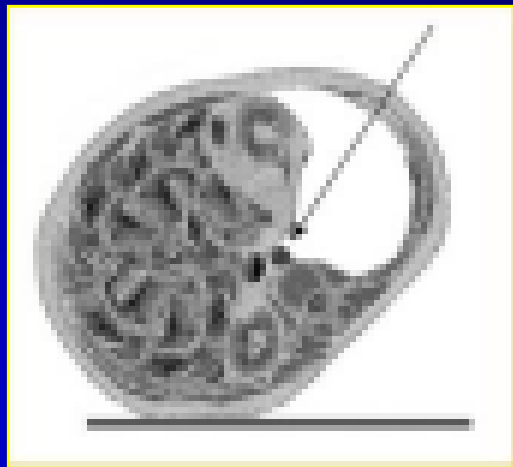
# Videoscopic approaches



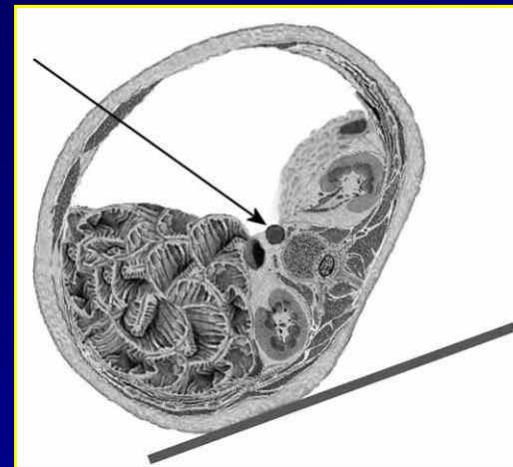
TP retrocolic



TP retrorenal



Retroperitoneoscopic



TP retrooduodenal

# ANASTOMOSI VASCOLARI

## *MORFOLOGIA*

- **TERMINO-TERMINALE**
- **TERMINO-LATERALE**
- **LATERO-LATERALE**



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

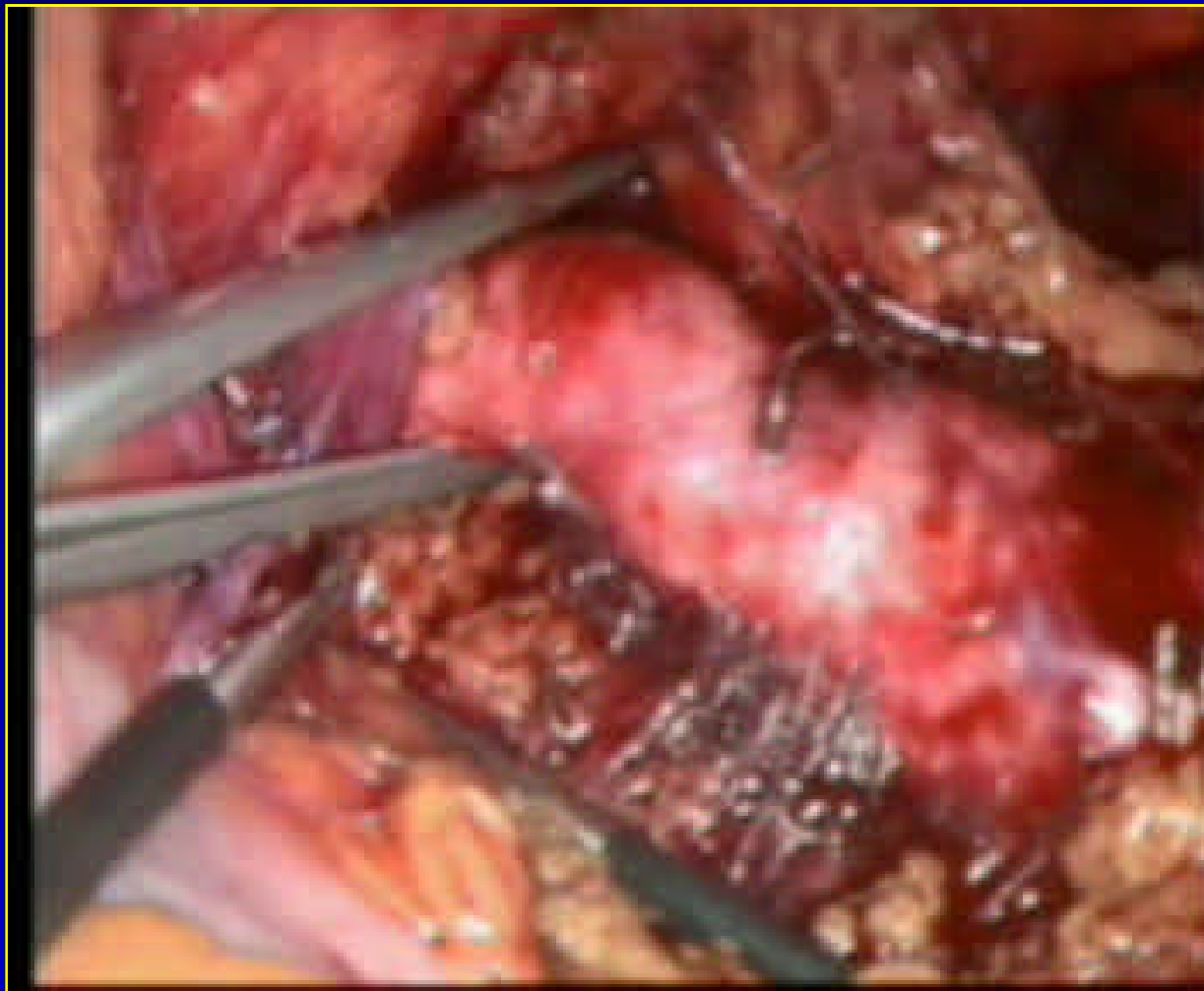
- **TERMINO-TERMINALE**
- **TERMINO-LATERALE**
- **LATERO-LATERALE**



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

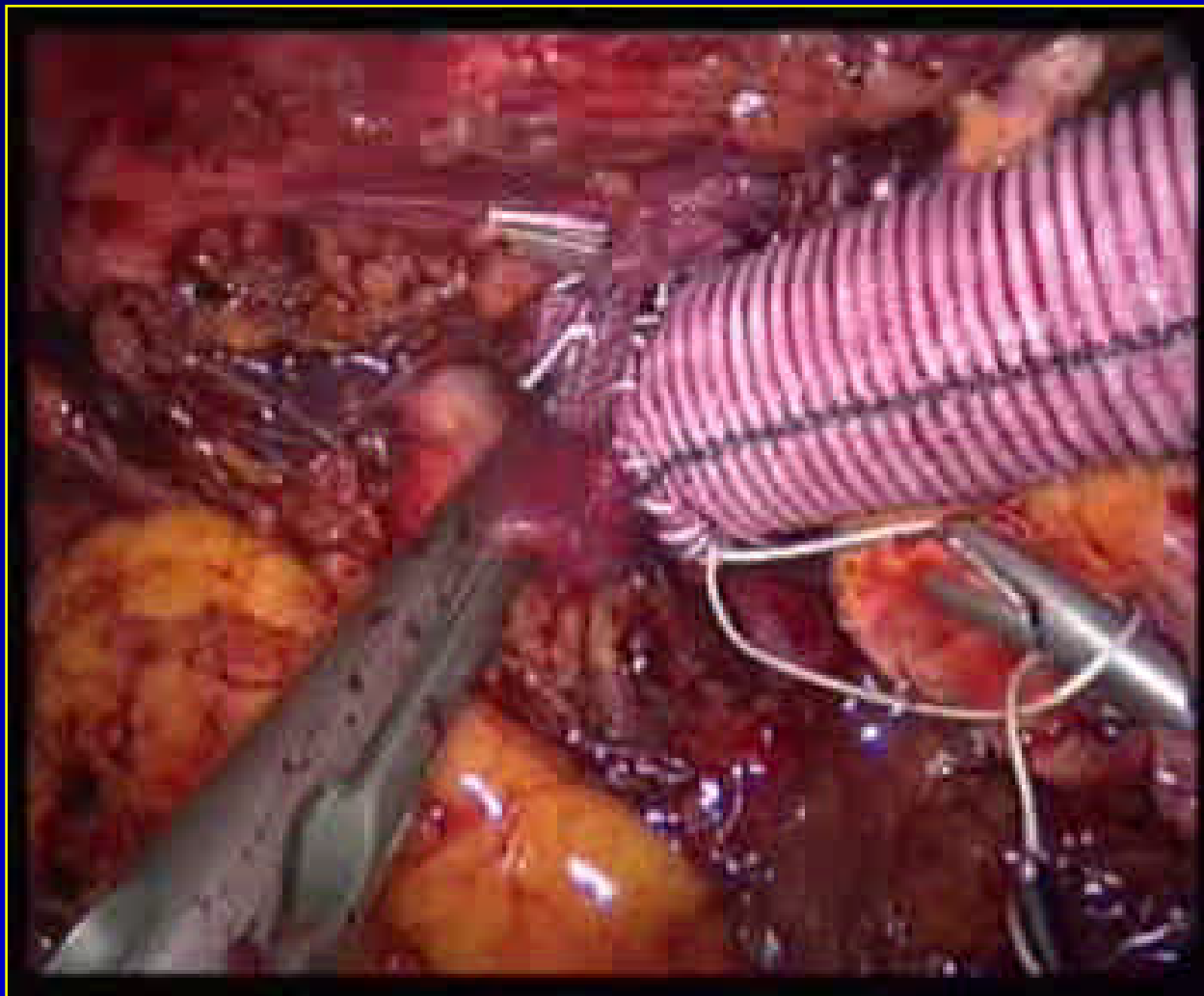
- TERMINO-TERMINALE



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

- TERMINO-TERMINALE





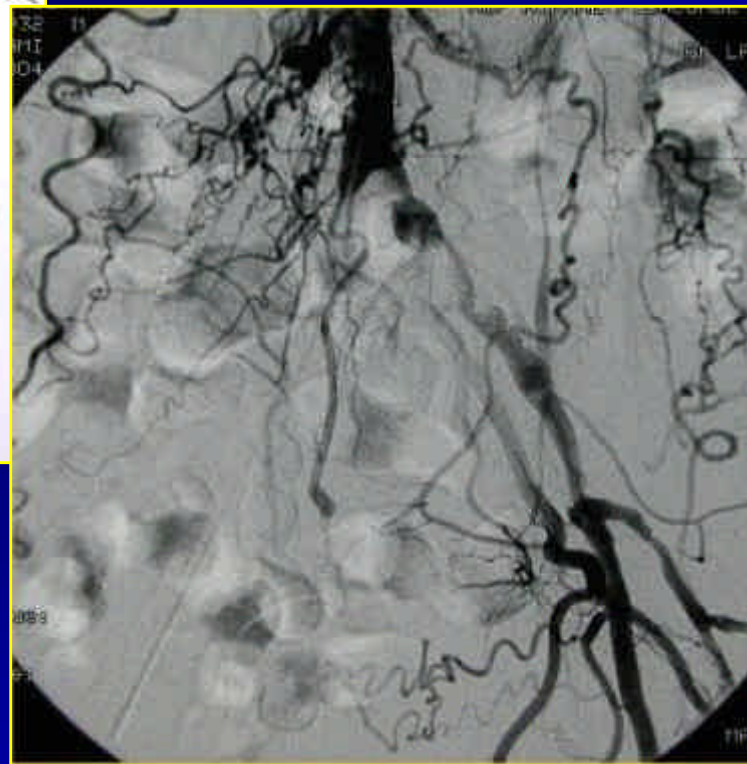
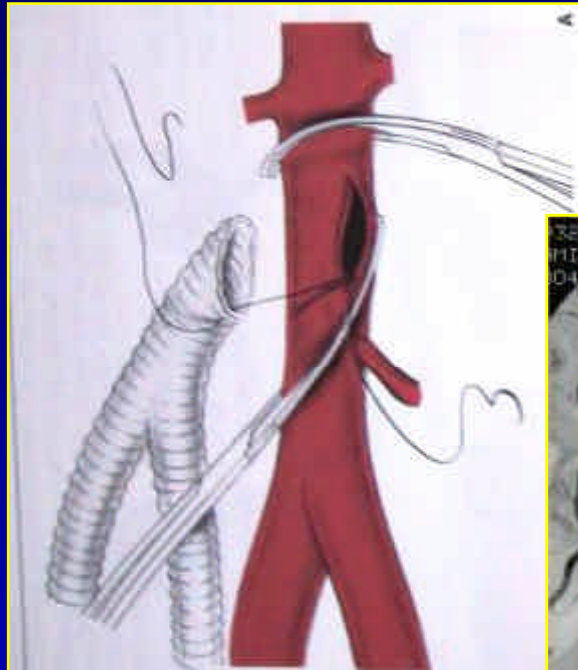
# ANASTOMOSI VASCOLARI

## MORFOLOGIA

- **TERMINO-TERMINALE**
- **TERMINO-LATERALE**
- **LATERO-LATERALE**



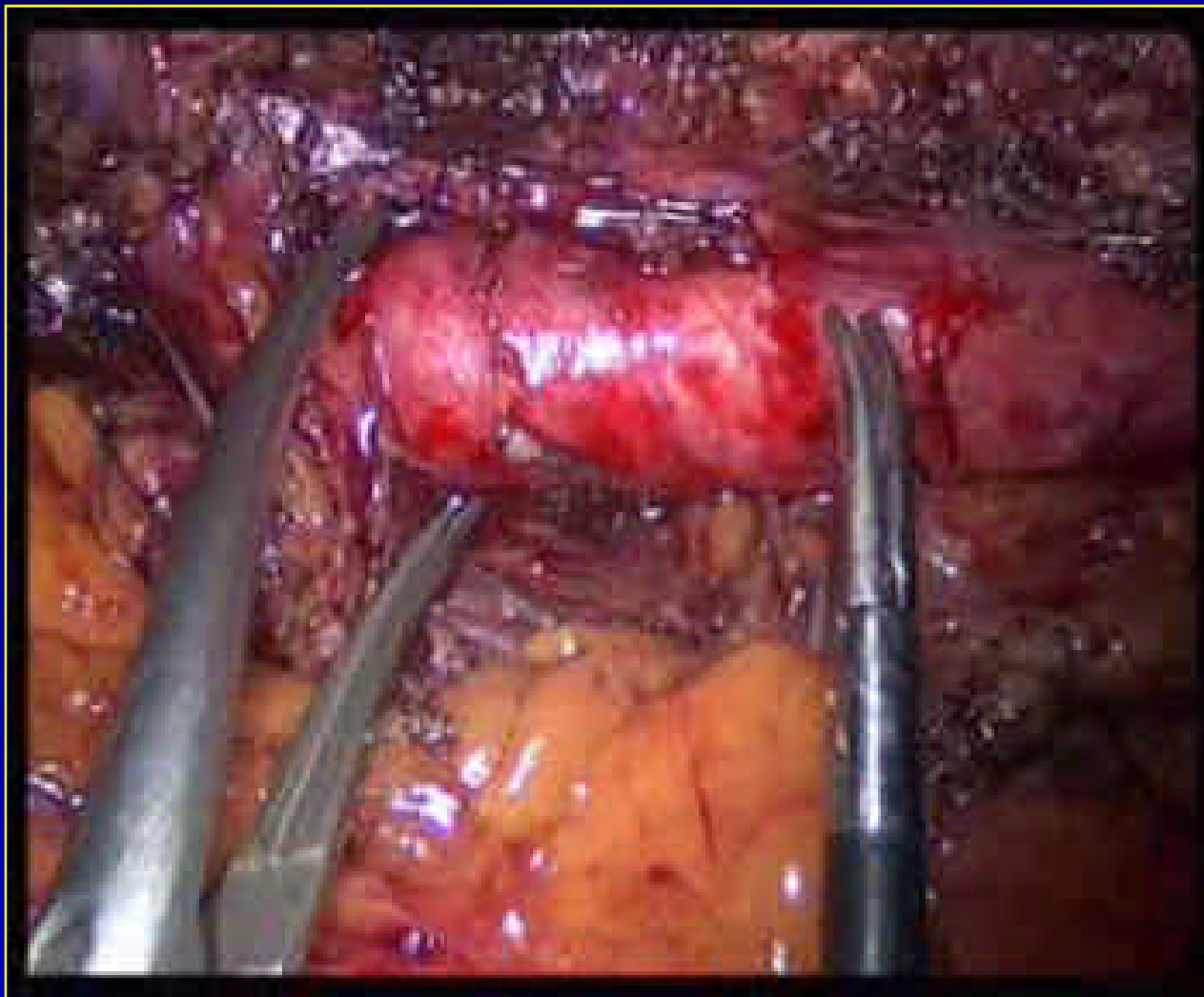
# Aortiliac Occlusive Diseases



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

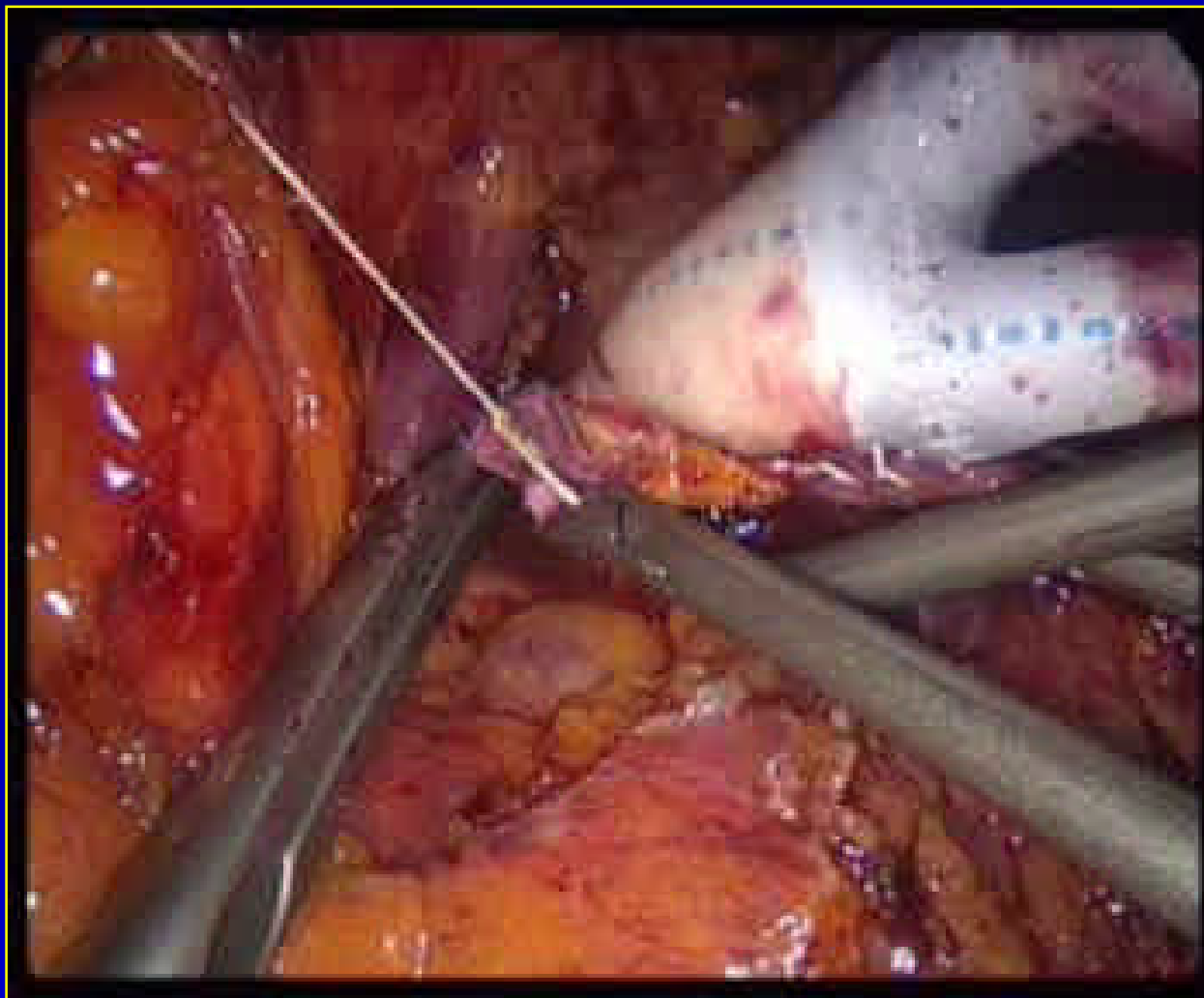
- TERMINO-LATERALE



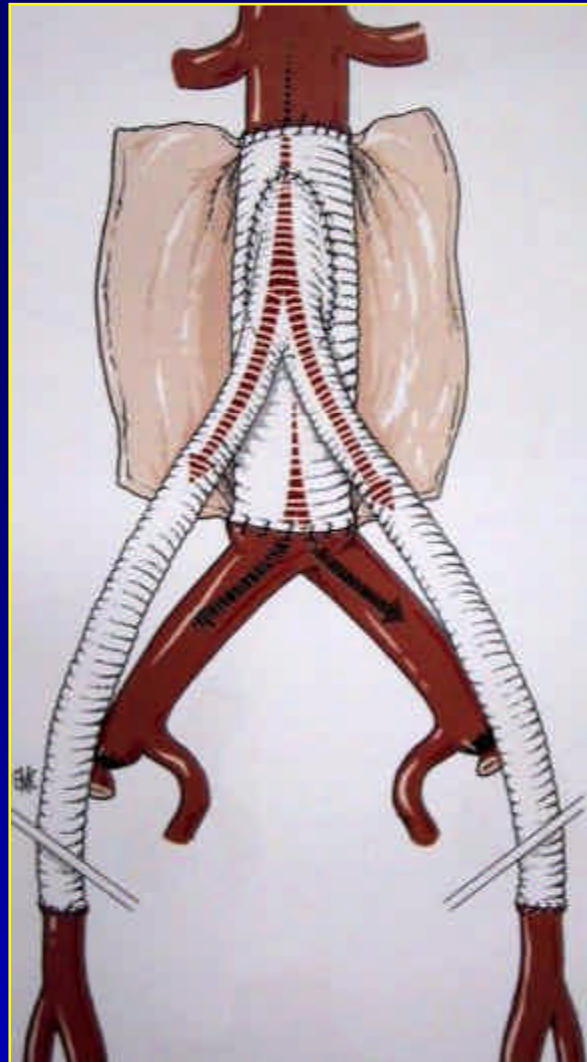
# ANASTOMOSI VASCOLARI

## MORFOLOGIA

- TERMINO-LATERALE



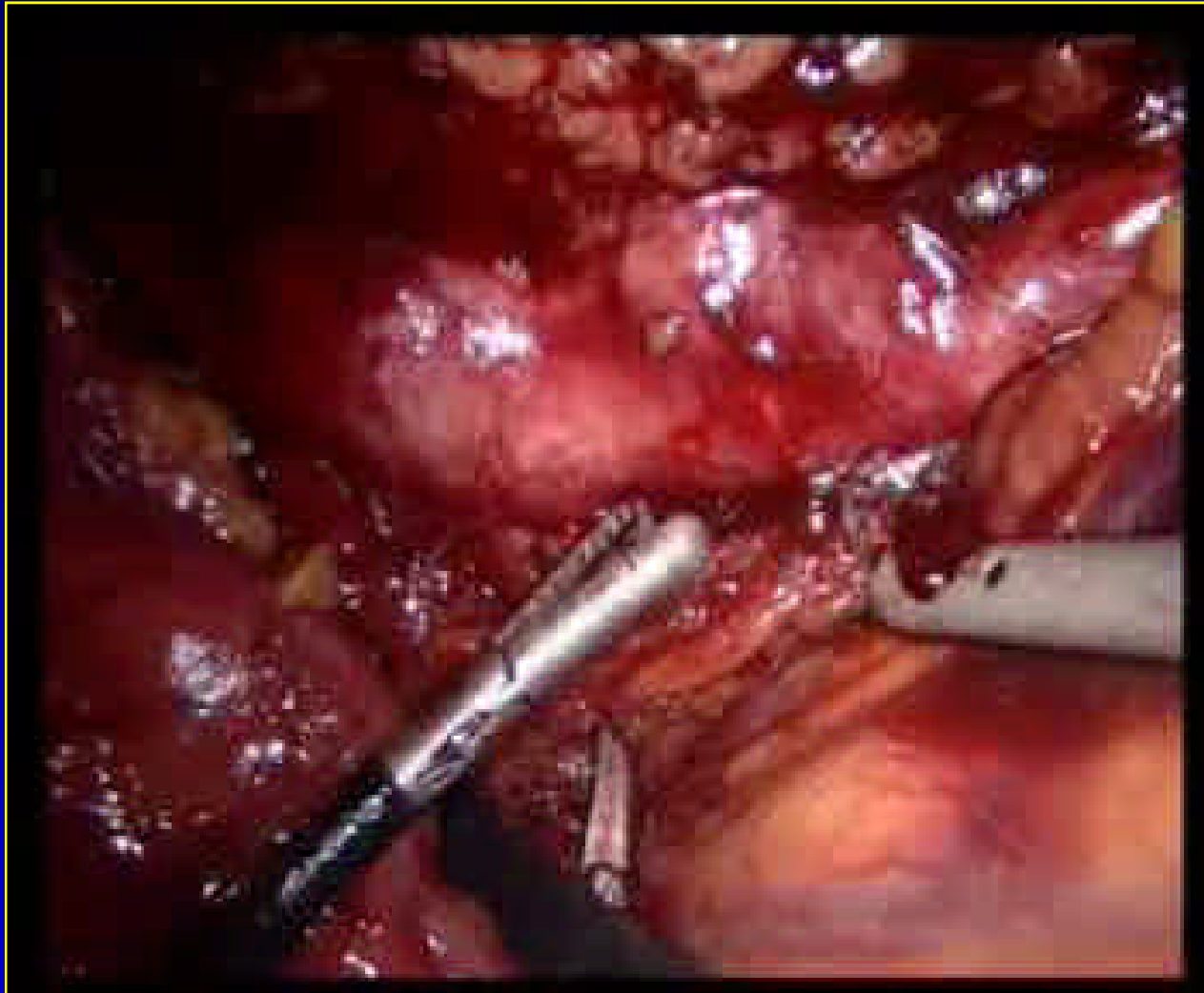
# AAA and Aortoliac Occlusive Diseases



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

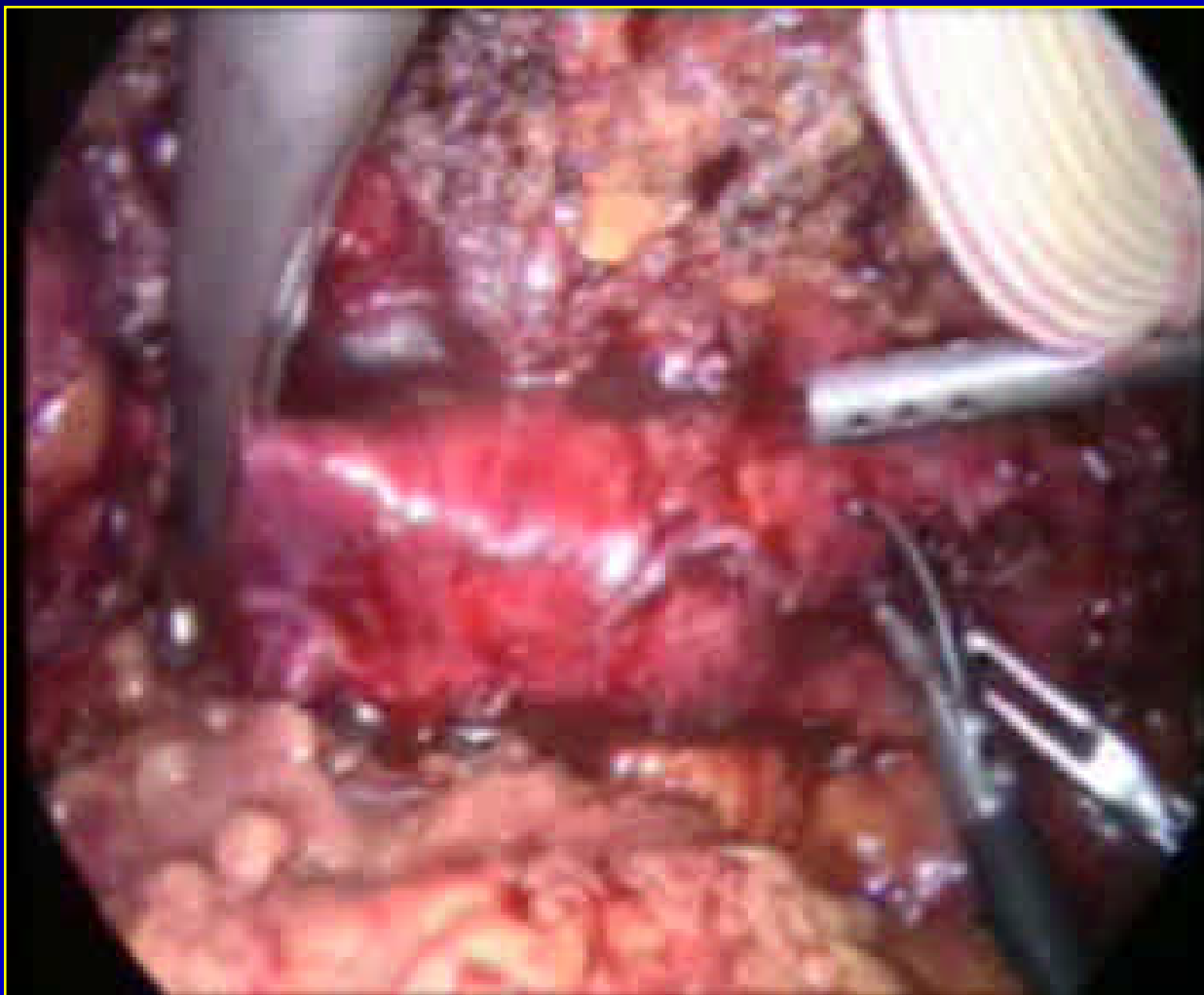
- T-T & T-L



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

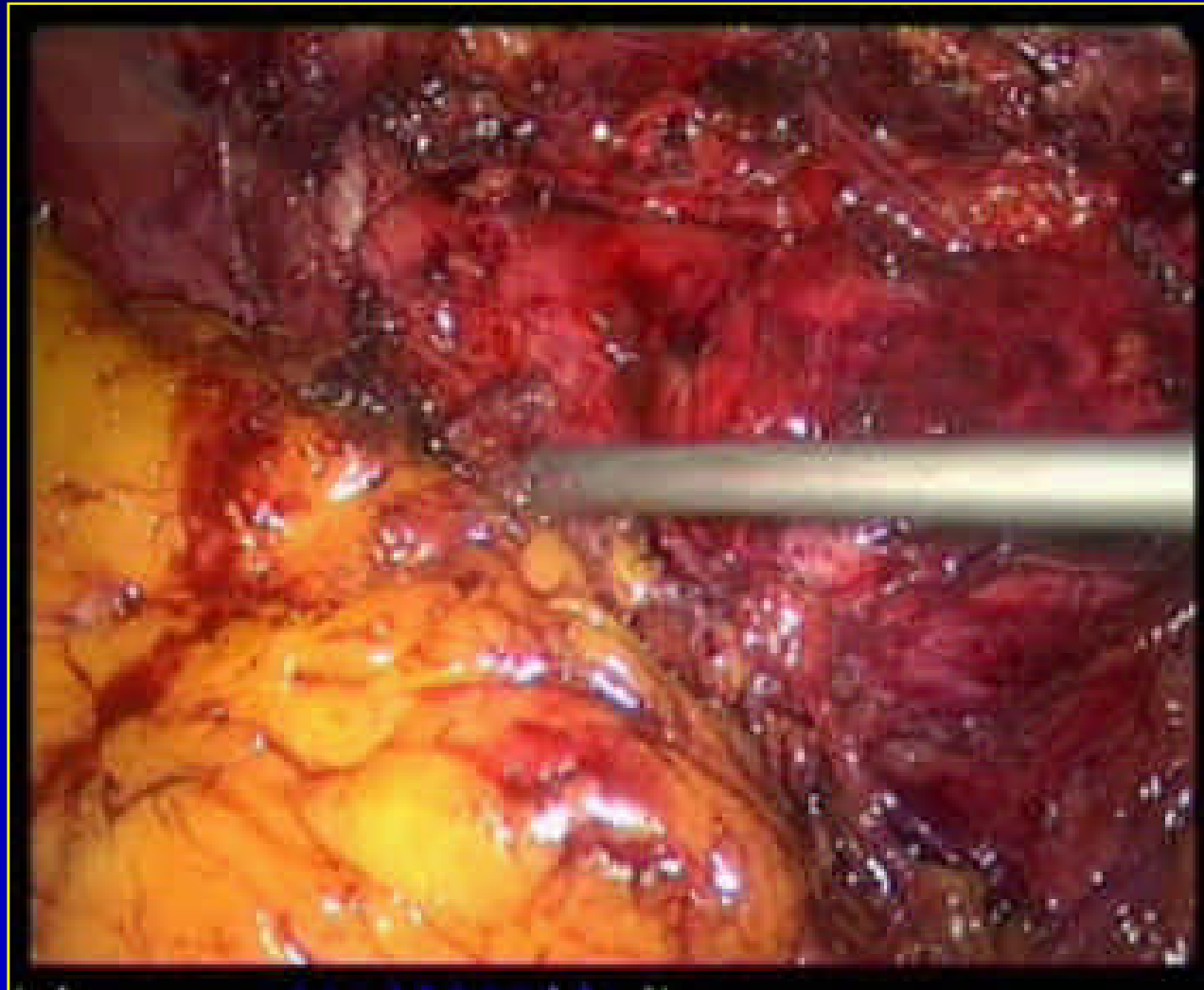
- T-T & CLAMPAGGIO SOPRARENALE



# ANASTOMOSI VASCOLARI

## MORFOLOGIA

- T-T & CLAMPAGGIO SOPRARENALE





# Discussione

- La Laparoscopia Totale è una Sfida Tecnica  
per i Chirurghi Vascolari
  - Nessun Programma di Formazione
  - Chirurgia Aortica d'Emblée
  - « Pressione Psicologica »
    - > Clampaggio
    - > Emorragia

# Training in 2D videoscopic sutures

- Laparo-training +++
  - ⇒ Every days
  - ⇒ 3-6 months



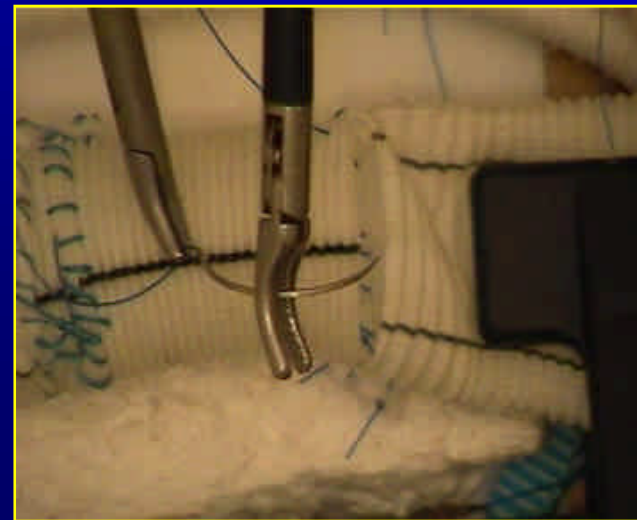
# Training in 2D videoscopic sutures

- Laparo-training

+++

⇒ Every days

⇒ 3-6 months



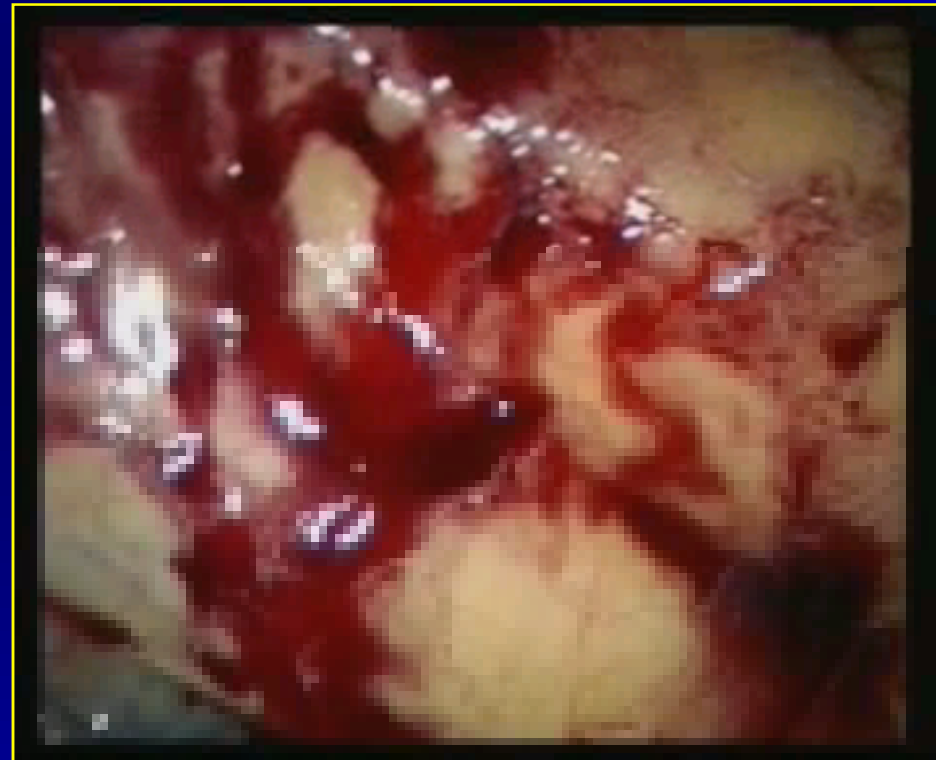
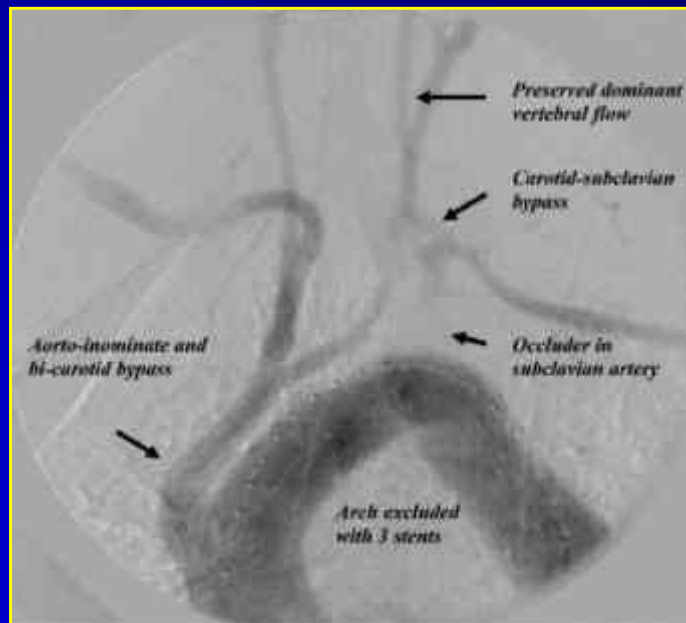
*no limits ?*

# Thoraco-Abdominal Aneurysms

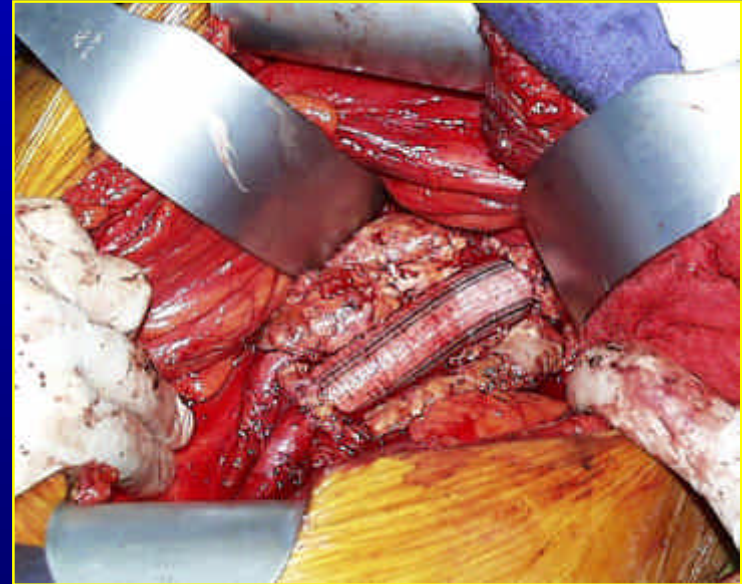
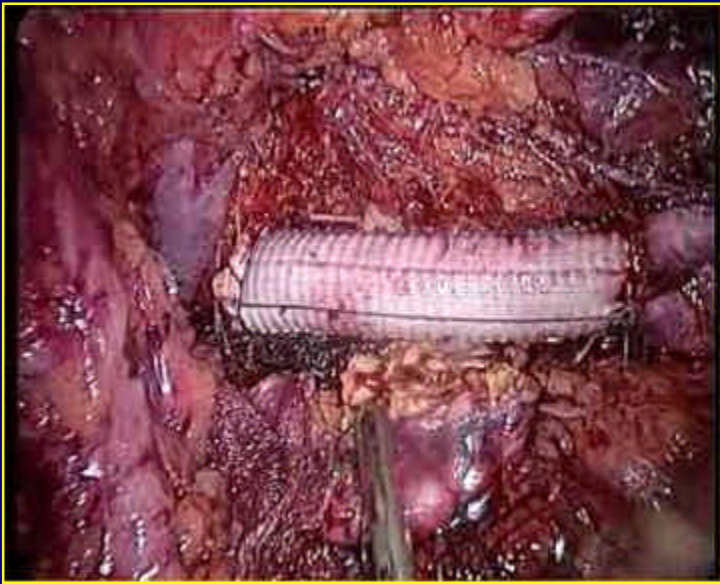


# Aortic Arch Aneurysm

## VIDEOENDOSCOPIC + TEVAR debranching







## Conclusion

Laparoscopy vs Open ?  
Driven by patients ?

