



UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II

***MASTER II LIVELLO CHIRURGIA ROBOTICA IN CHIRURGIA GENERALE  
DIRETTORE: PROF. G.D. DE PALMA***

**TITOLO TESI**

***BOTTOM UP  
APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA  
NEL CANCRO DEL COLON DESTRO***

**RELATORE:  
PROF. MARCO MILONE**

**ALLIEVO:  
DR MASSIMILIANO VARRIALE m.ZGG000035**

**ANNO ACCADEMICO 2023/24**

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***Criticità***

- Cancro colon destro: ↓ Disease Free ed Overall Survival;
- Implicazioni Biologiche ed Embriologiche;
- CME D3;
- Emicolectomia dx VLS vs Rob;
- Anastomosi Intracorporea.

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***Fattibilità***

- Necessità maggior operatività rispetto alle limitazioni della laparoscopia;
- Approccio Spazi Embriologici più efficace ed efficiente;
- Approccio Frontale alle strutture vascolari;
- Anastomosi Intracorporea semplificata nel gesto;
- Migliorare i risultati oncologici a medio e lungo termine.

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***Standardized surgery for colonic cancer: complete mesocolic excision and central ligation – technical notes and outcome.***

[W. Hohenberger](#), [K. Weber](#), [K. Matzel](#), [T. Papadopoulos](#), [S. Merkel](#)

[Volume11, Issue4](#) May 2009 Pages 354-364

***Conclusion: The technique of CME in colon cancer surgery aims at a specimen with intact layers and a maximum of lymphnode harvest. This is translated into lower local recurrence rates and better overall survival.***

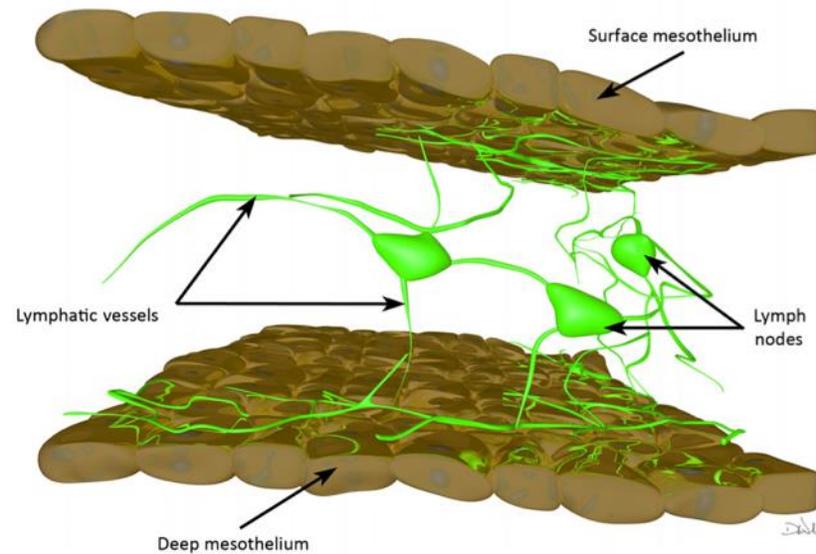
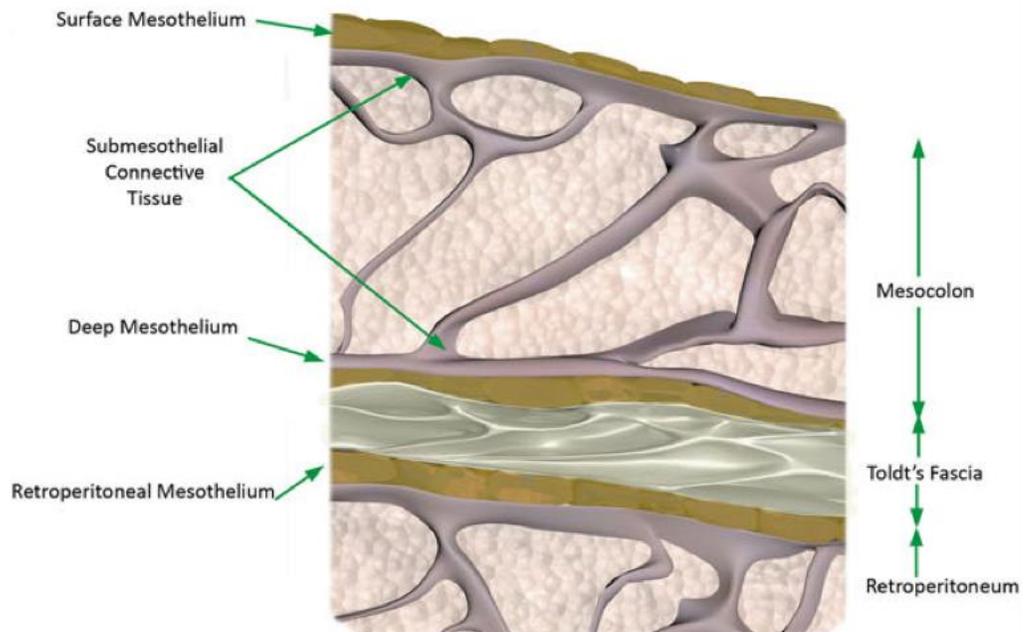
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*Criteri di Resezione Colica Dx Radicale  
Identificazione step chirurgici*

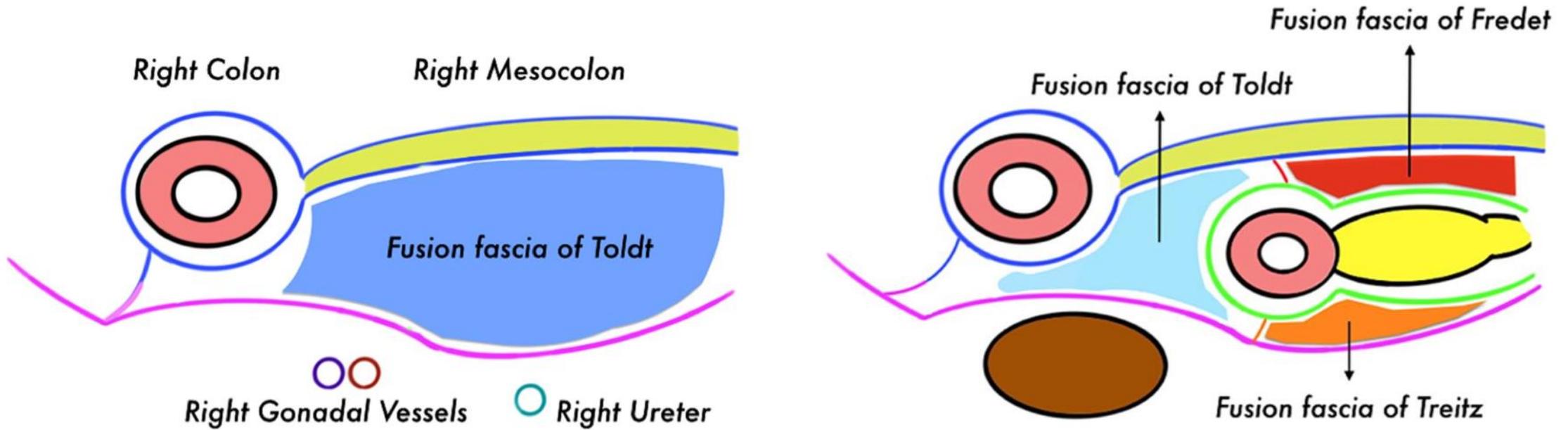
- LEGATURA DEI VASI ALL'ORIGINE (100%)
- PRESERVAZIONE DELL'INTEGRITA' DEL MESOCOLON (73%)
- DISSEZIONE LUNGO IL PIANO DELLA SMV (67%)
- DISSEZIONE LUNGO IL BORDO SINISTRO DELLA SMA (11%)
- DISSEZIONE DEL TRONCO DI HENLE (45%)
- ASPORTAZIONE DEI LINFONODI SOTTOPILORICI (18%)
- OMENTECTOMIA (39%)
- MANOVRA DI KOCHER (11%) PER MASSIMA RADICALITA' ONCOLOGICA

# BOTTOM UP

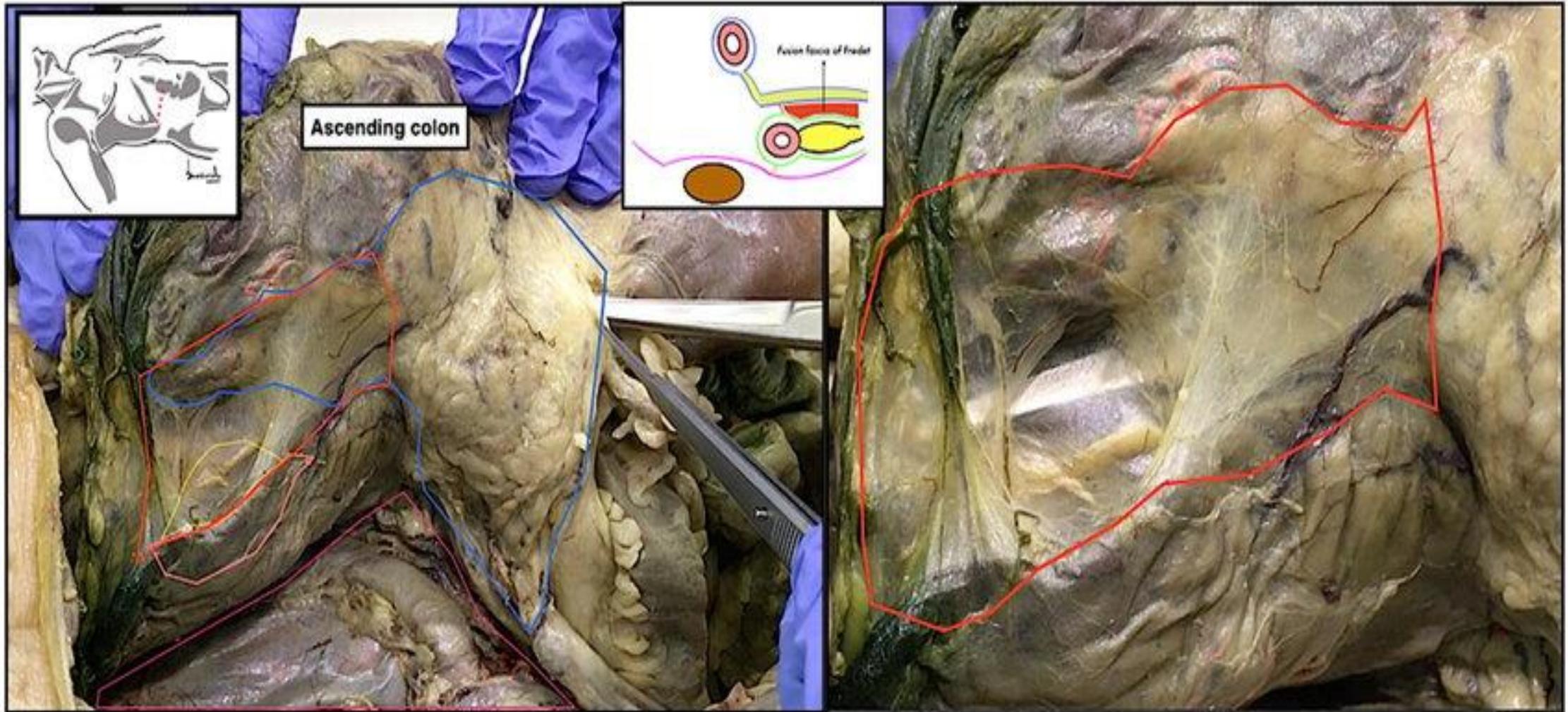
## APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO



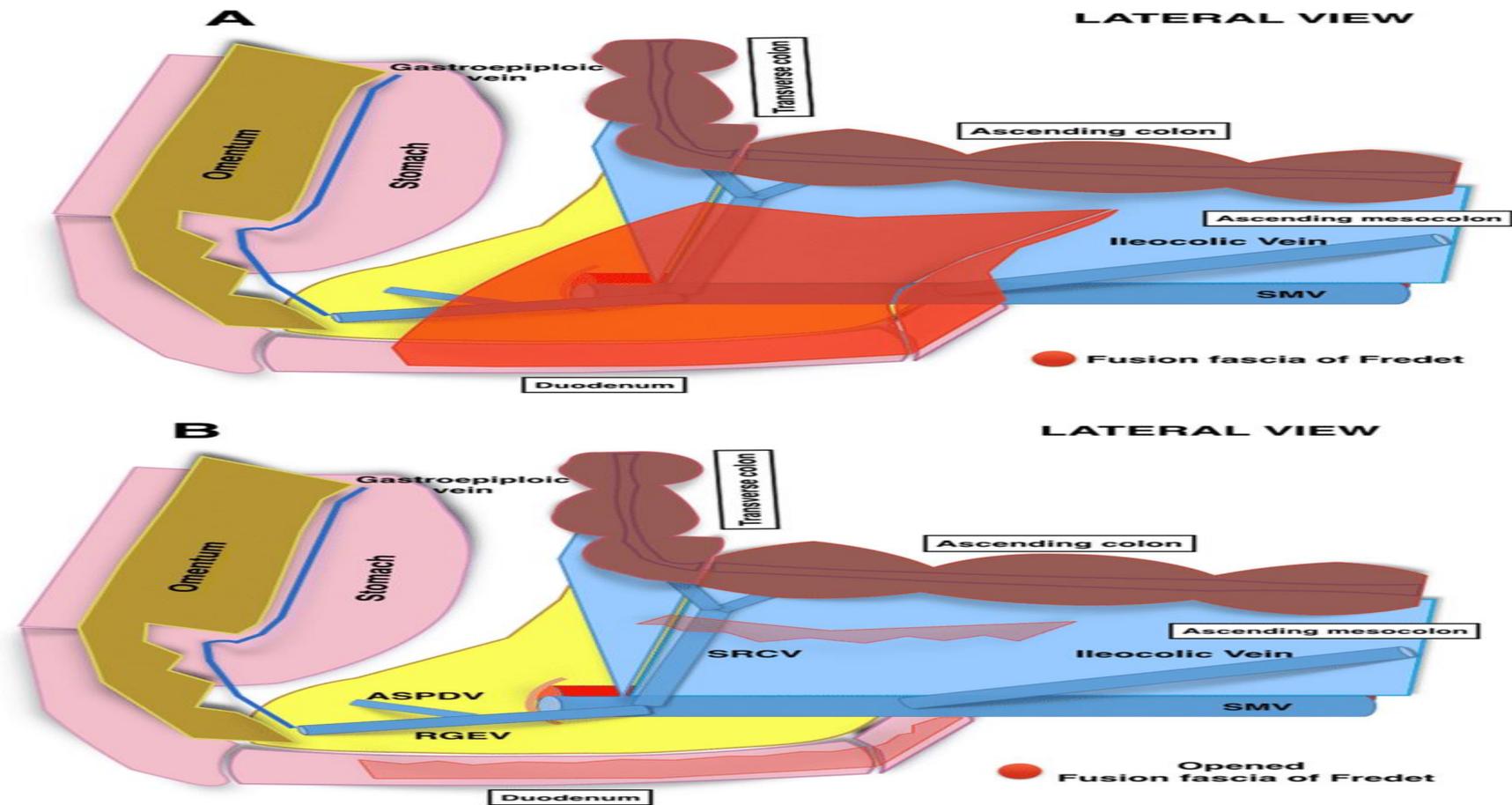
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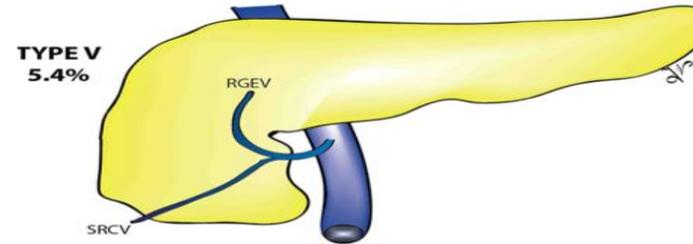
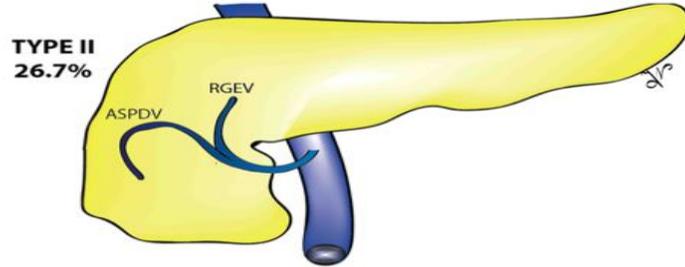
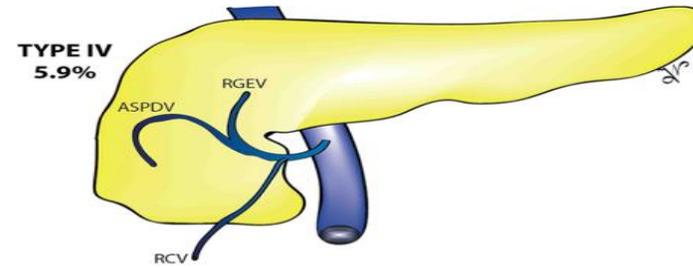
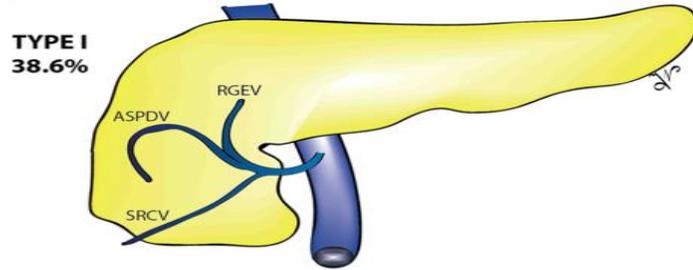


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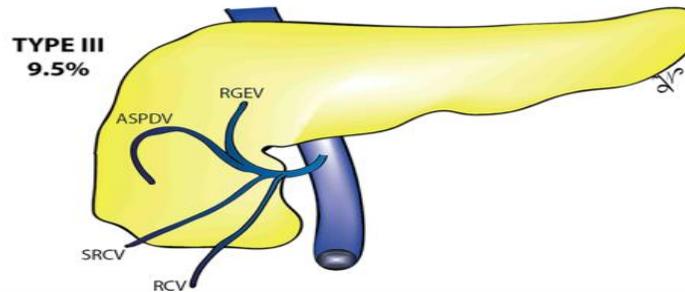


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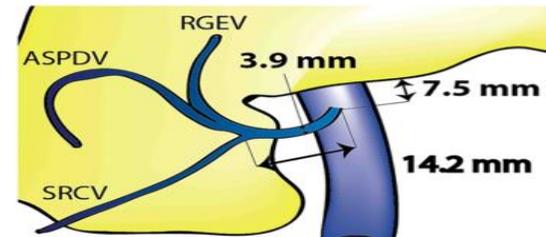
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**TYPE VI - all the others**



**Diameter, length,  
distance from inferior border of the pancreas**



# BOTTOM UP APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO



## Descrizione



**emicolectomia dx allargata laparoscopica per cancro localmente avanzato del colon trasverso dx**

**0**  
Mi piace

**6.128**  
Visualizzazioni

**2010**  
7 mag

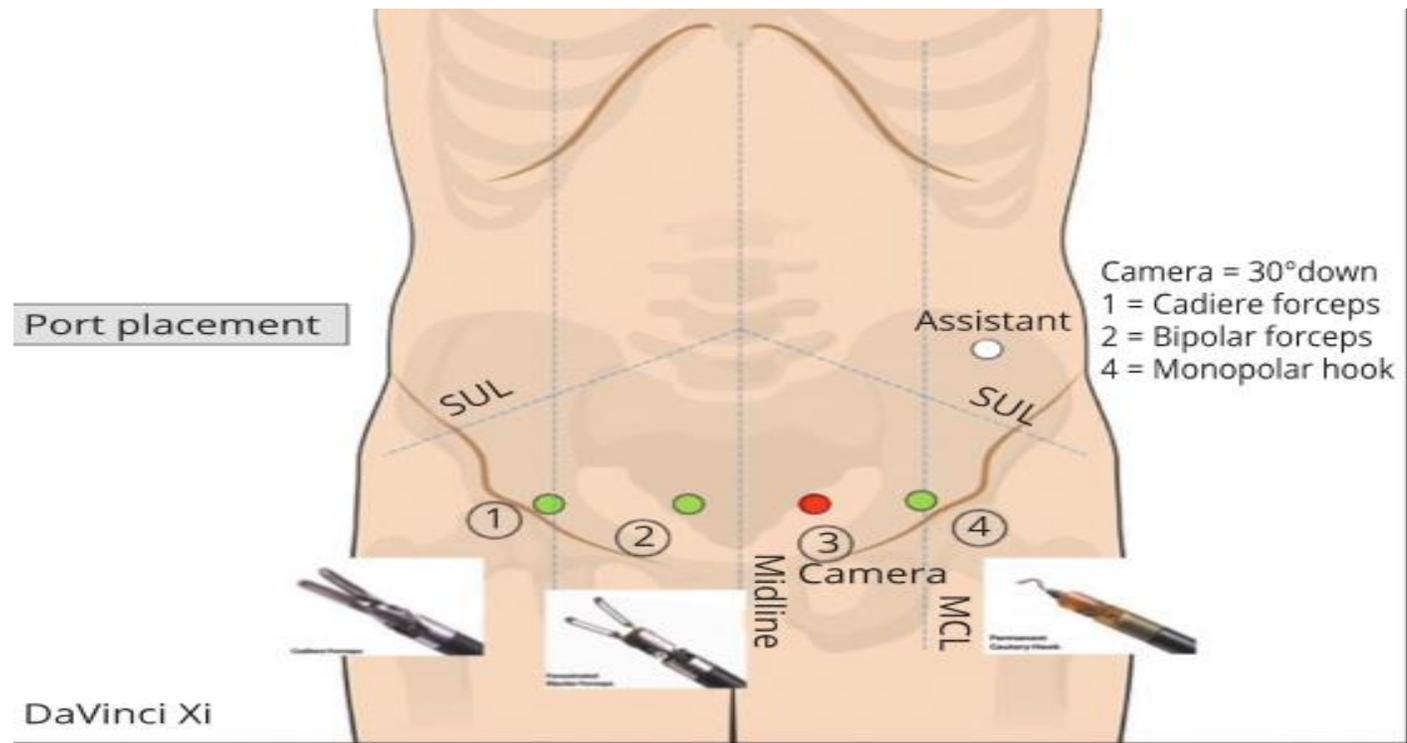
si illustra brevemente l'approccio eseguito secondo gayet per l'esecuzione di una emicolectomia dx allargata laparoscopica by dr massimiliano varriale - roma



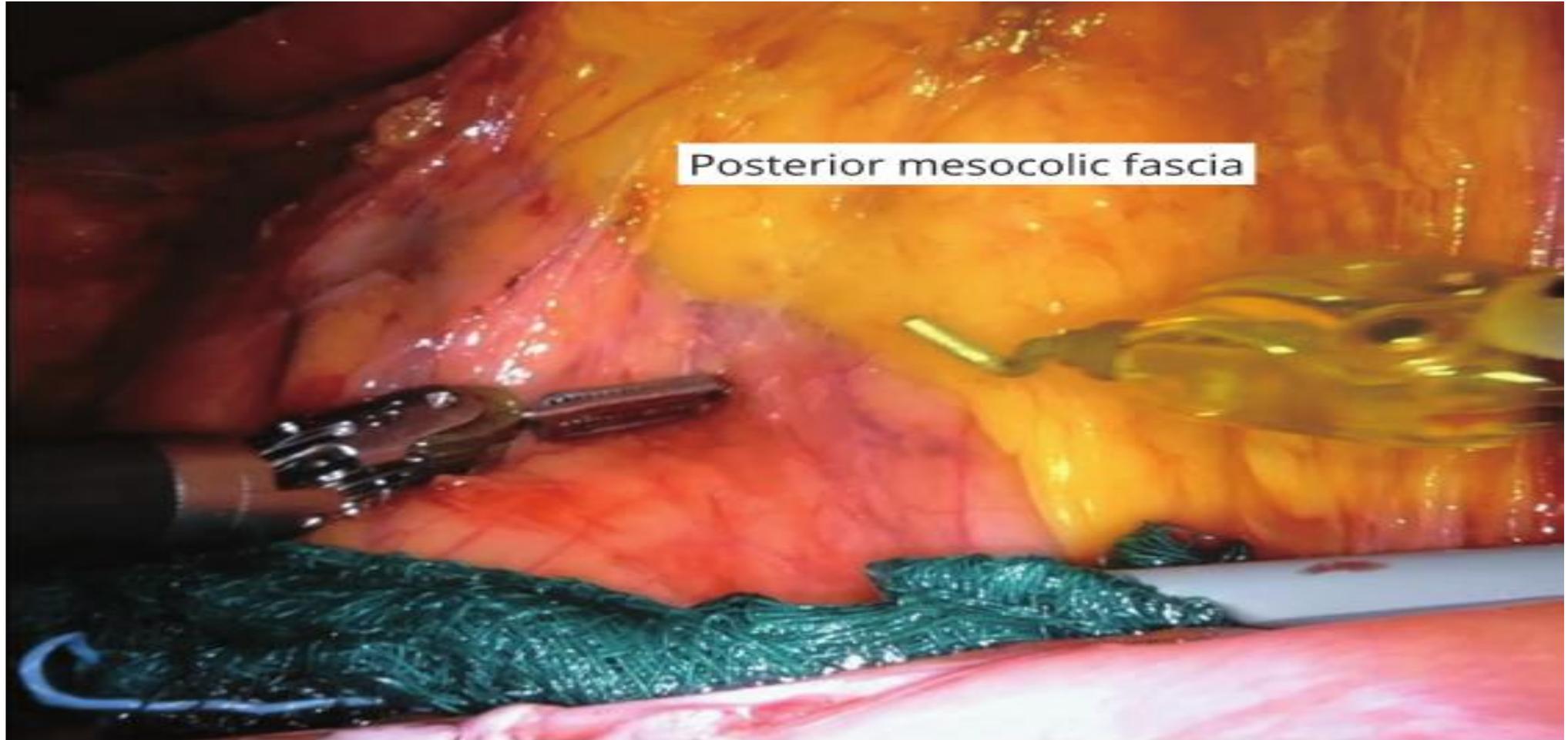
**emicolectomia dx allargata laparoscopica per cancro localmente avanzato del colo...**

6128 visualizzazioni 14 anni fa ... altro

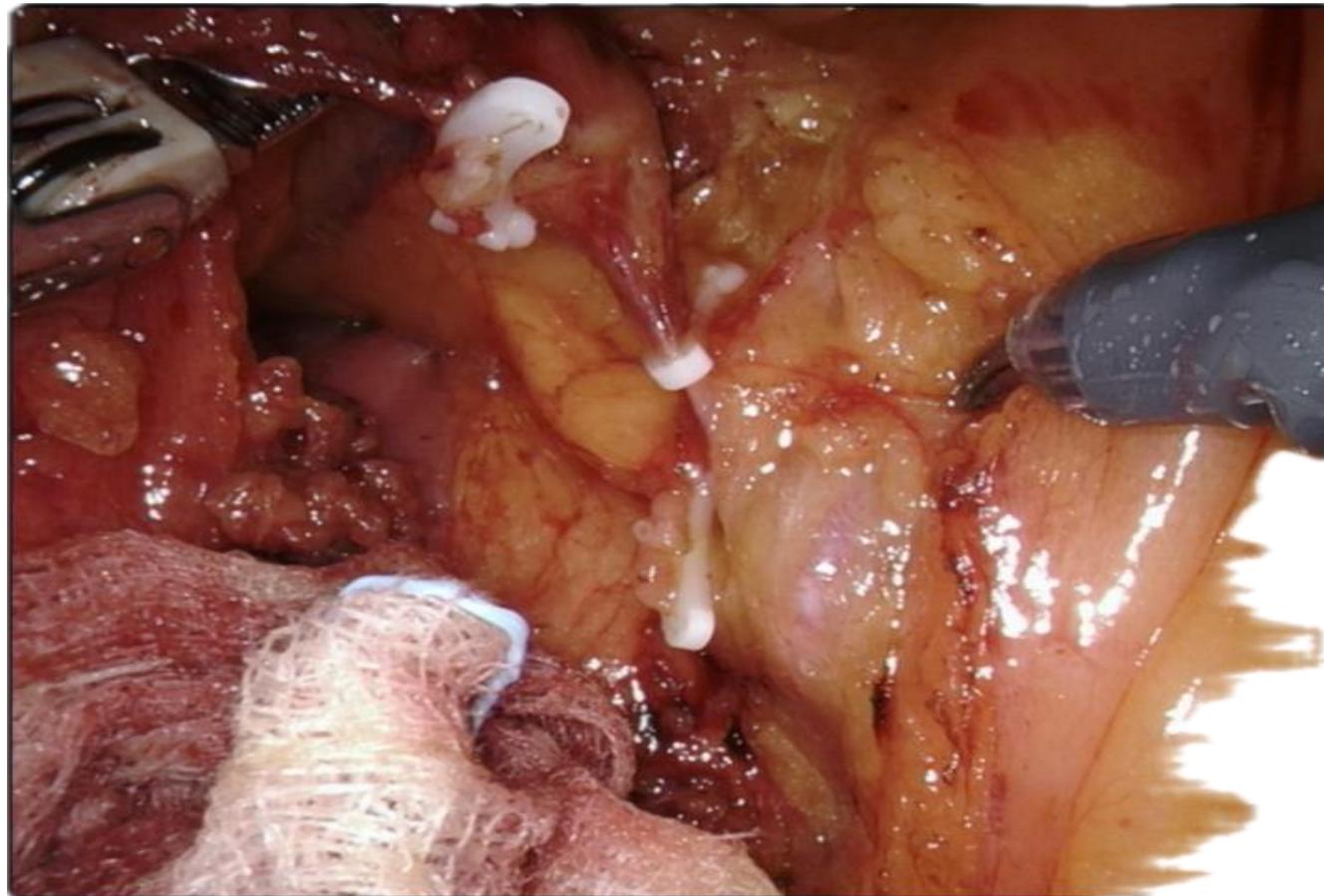
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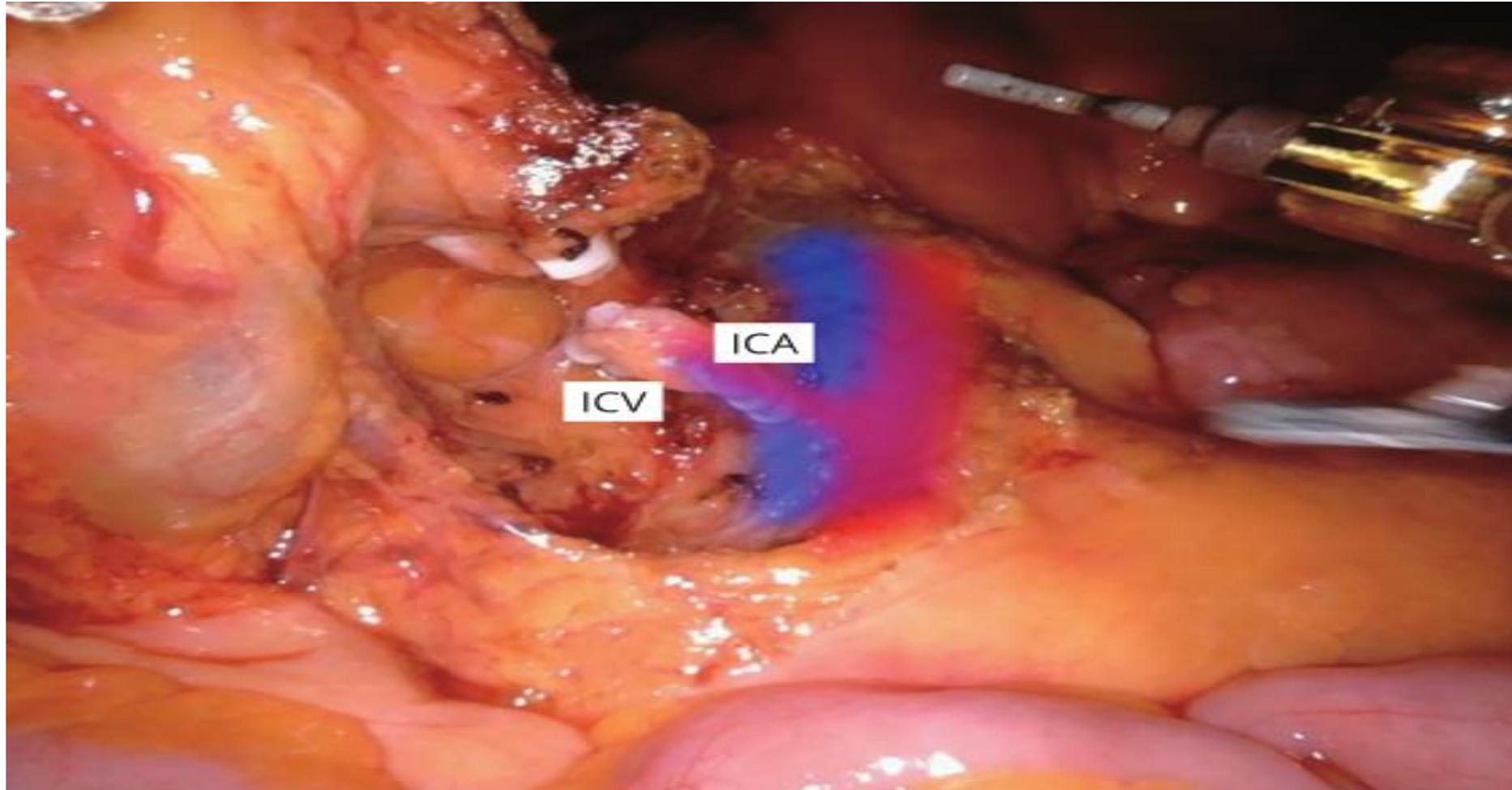
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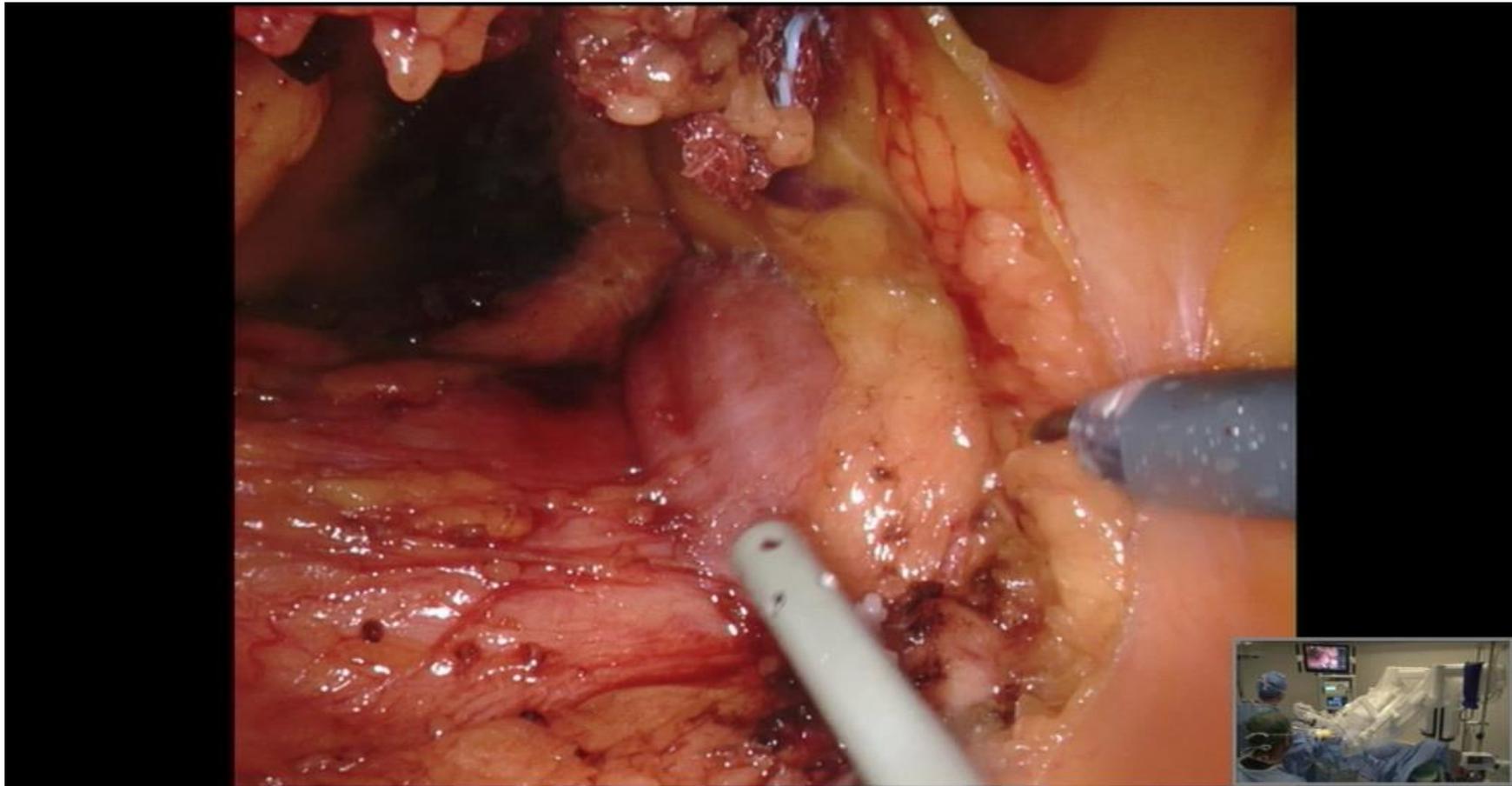
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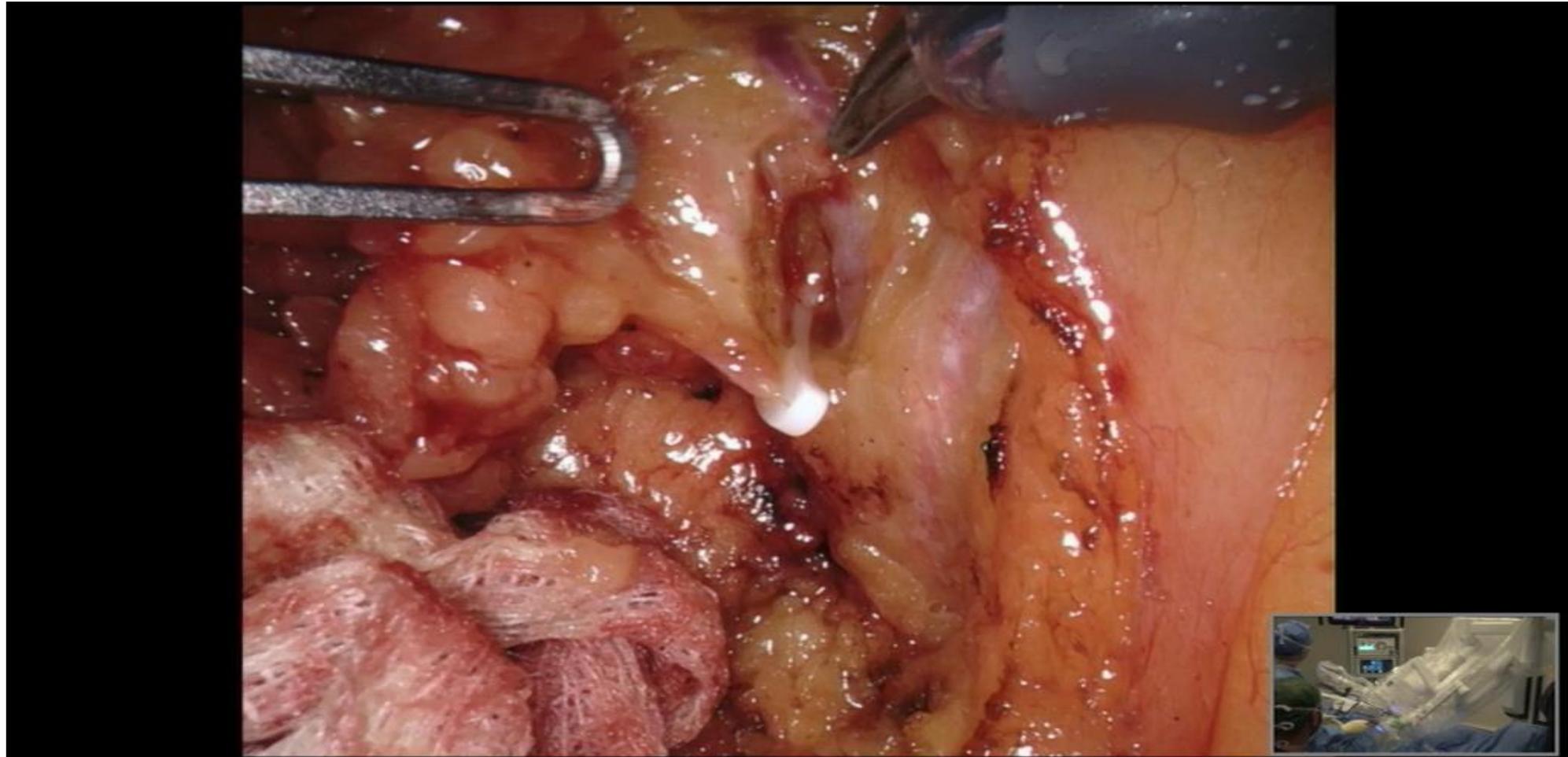
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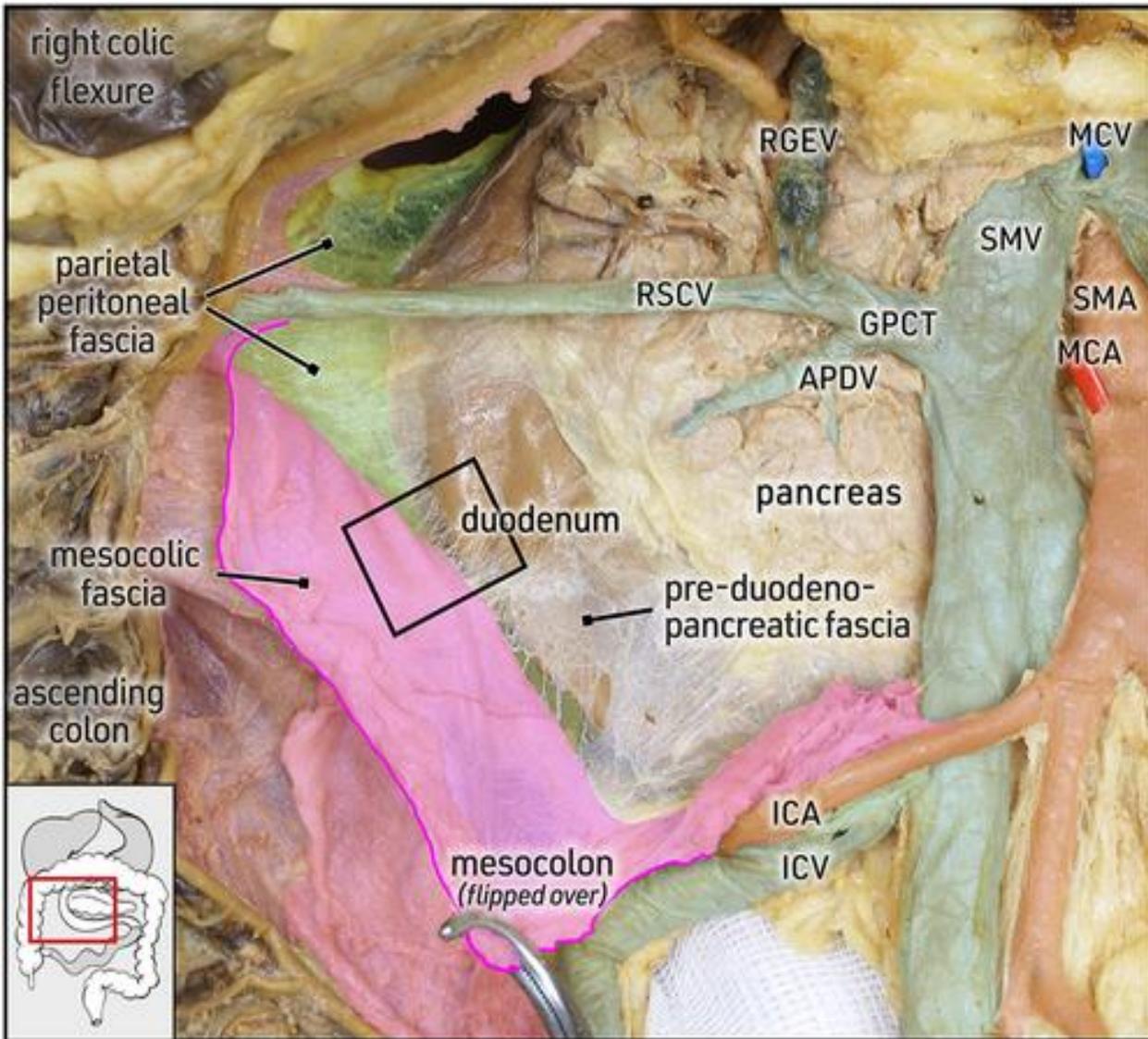


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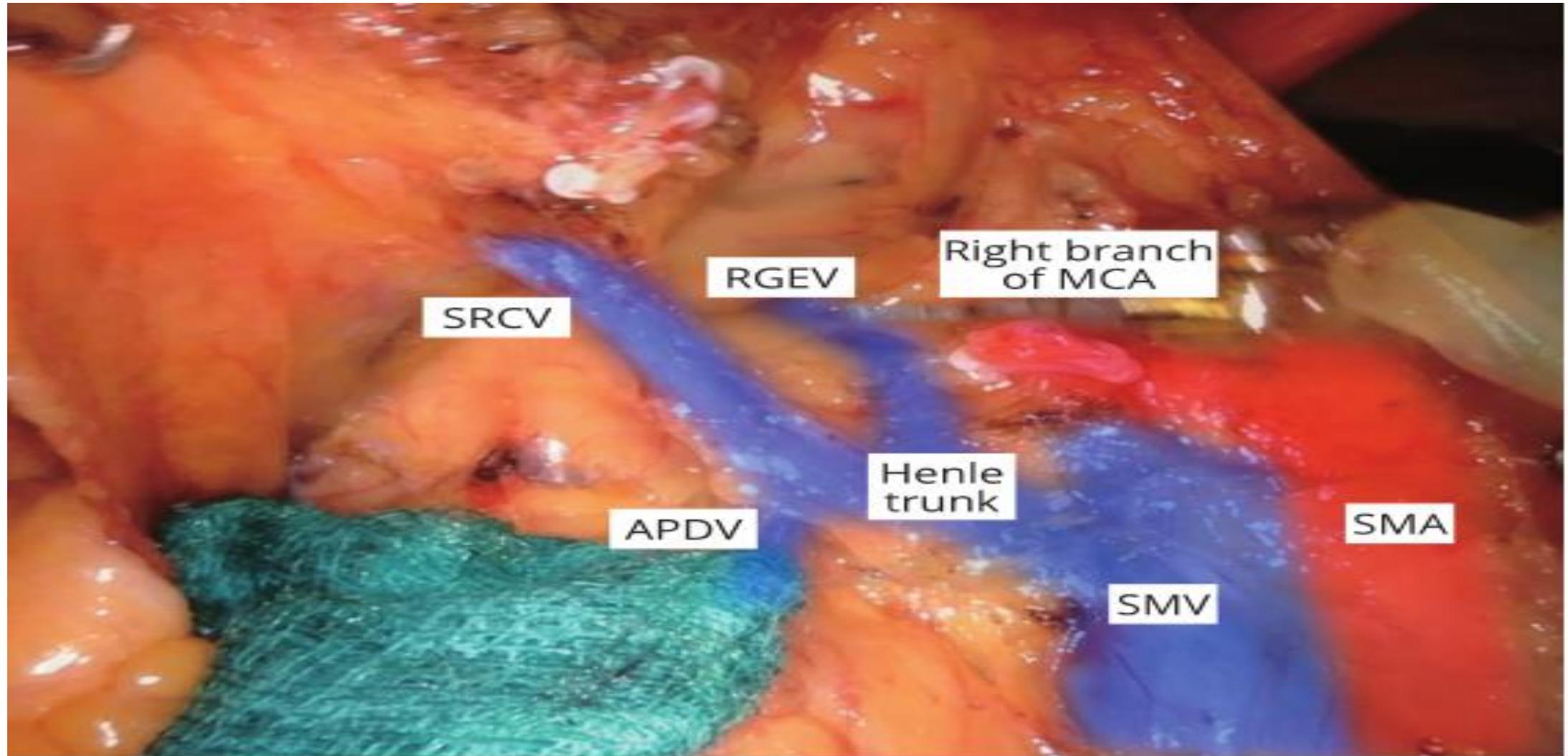
# BOTTOM UP

## APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO



Exposure of the retrocolic fascial system. Ventral view onto the ascending colon, mesocolon, pancreas and duodenum. The mesocolon is detached from the duodenum and pancreas and reflected caudo-laterally (clamp), revealing the pre-duodenopancreatic fascia. The ventral leaf of the ascending mesocolon is partly removed to expose its dorsal leaf (mesocolic fascia). The parietal peritoneal fascia extends behind the mesocolon and the duodenum/pancreas. The tributaries of the gastropancreaticocolic trunk (GPCT, 'trunk of Henle') are seen in front of the pancreatic head, comprising the right gastroepiploic vein (RGEV), the right superior colic vein (RSCV) and the anterior pancreaticoduodenal veins (APDV) draining into the superior mesenteric vein (SMV). Both the middle colic vein (MCV, blue marker) and the middle colic artery (MCA, red marker) are cut at their origin. The ileocolic artery (ICA) originates from the superior mesenteric artery (SMA), crosses the SMV ventrally and joins the ileocolic vein (ICV). The black rectangle indicates the region taken for histological studies. Formalin-fixed specimen

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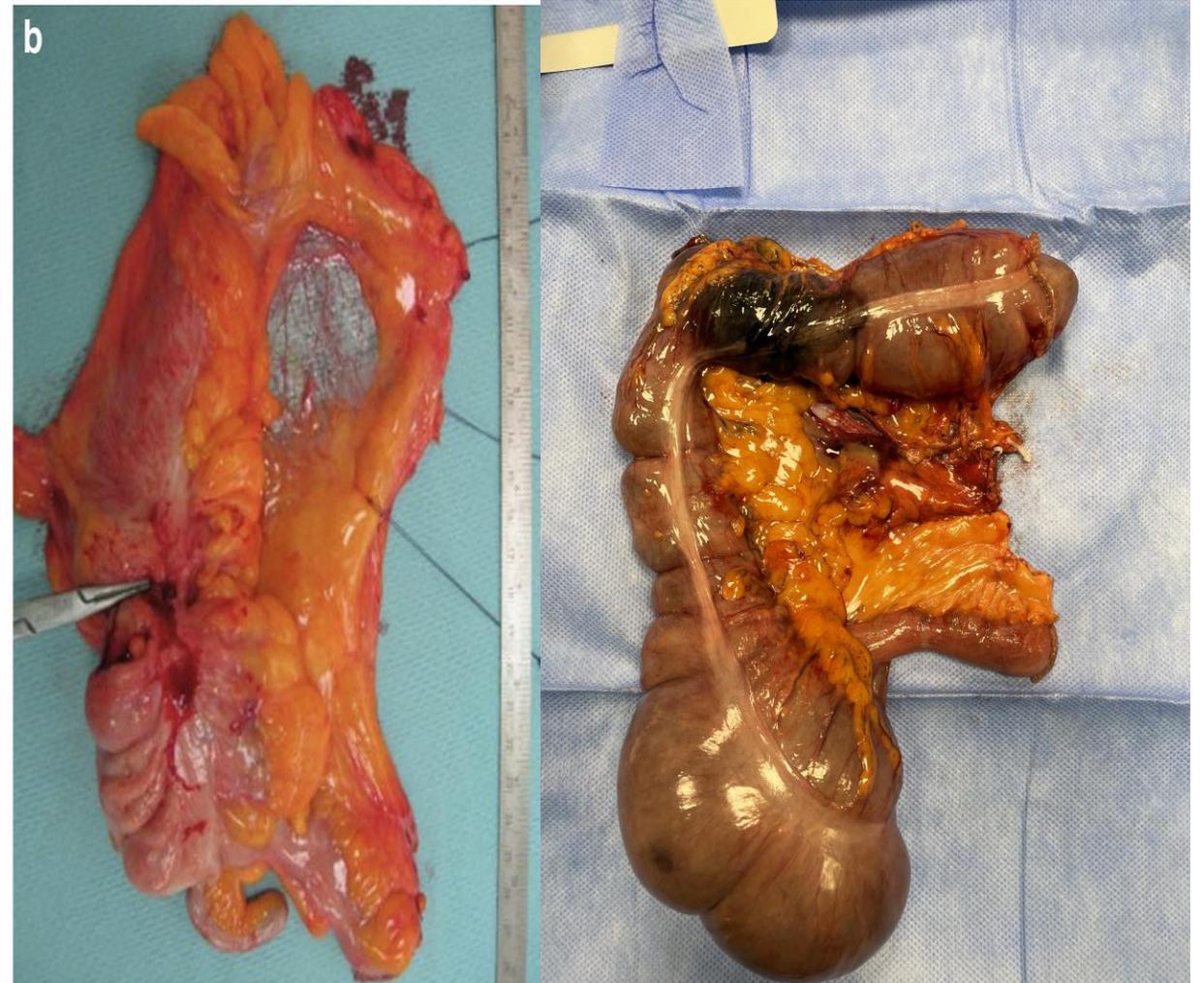
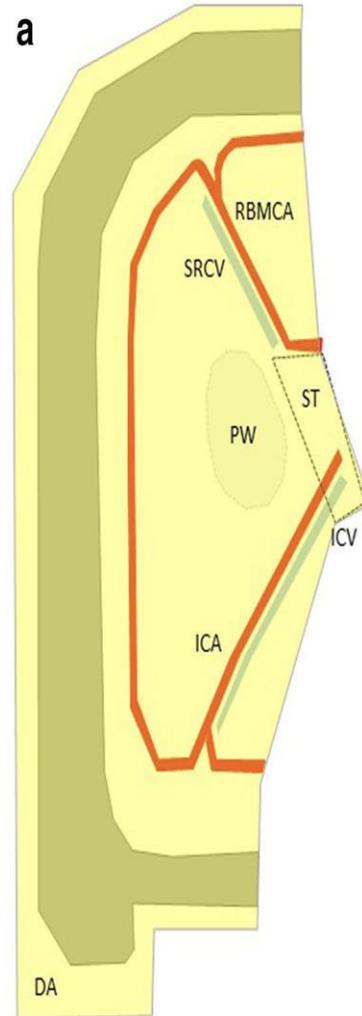


# BOTTOM UP

## APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO

**BENZ Class.:** Schematic view (a) and typical example (b) of **Type 0 specimen.**

DA Dissection area,  
GTH Gastrocolic trunk of Henle,  
ICA Ileocolic artery,  
ICV Ileocolic vein,  
PW Peritoneal window,  
RBMCA Right branch middle colic artery,  
SRCV Superior right colic vein,  
ST Surgical trunk

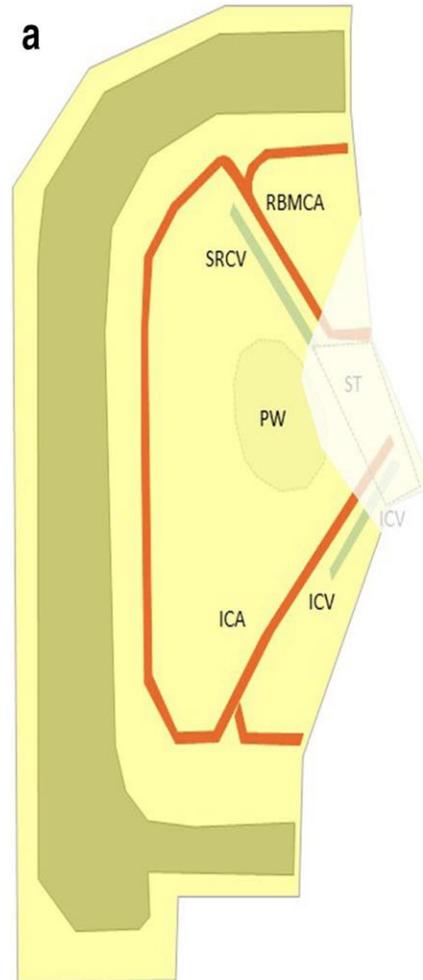


# BOTTOM UP

## APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO

***BENZ Class.:*** Schematic view (a) and typical example (b) of ***Type I specimen.***

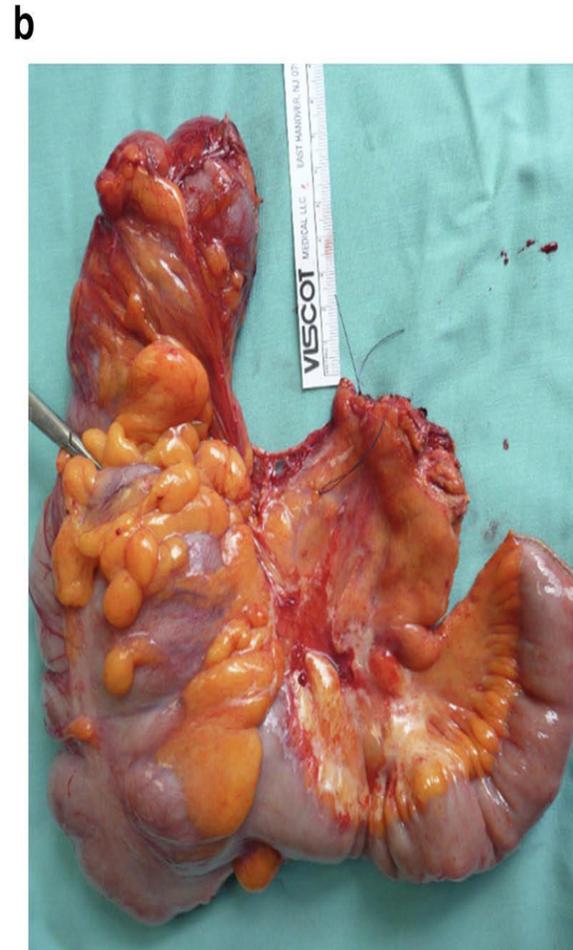
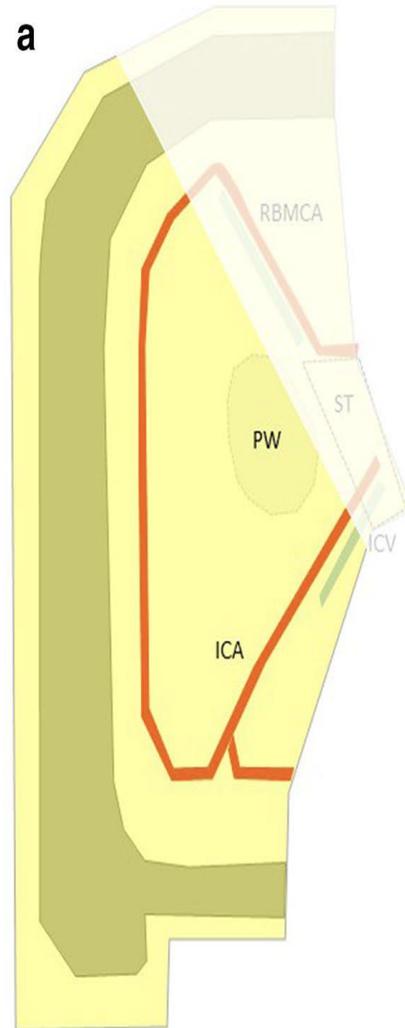
DA Dissection area,  
GTH Gastrocolic trunk of Henle,  
ICA Ileocolic artery, ICV  
Ileocolic vein,  
PW Peritoneal window,  
RBMCA Right branch  
middle colic artery,  
SRCV Superior right colic  
vein, ST Surgical trunk



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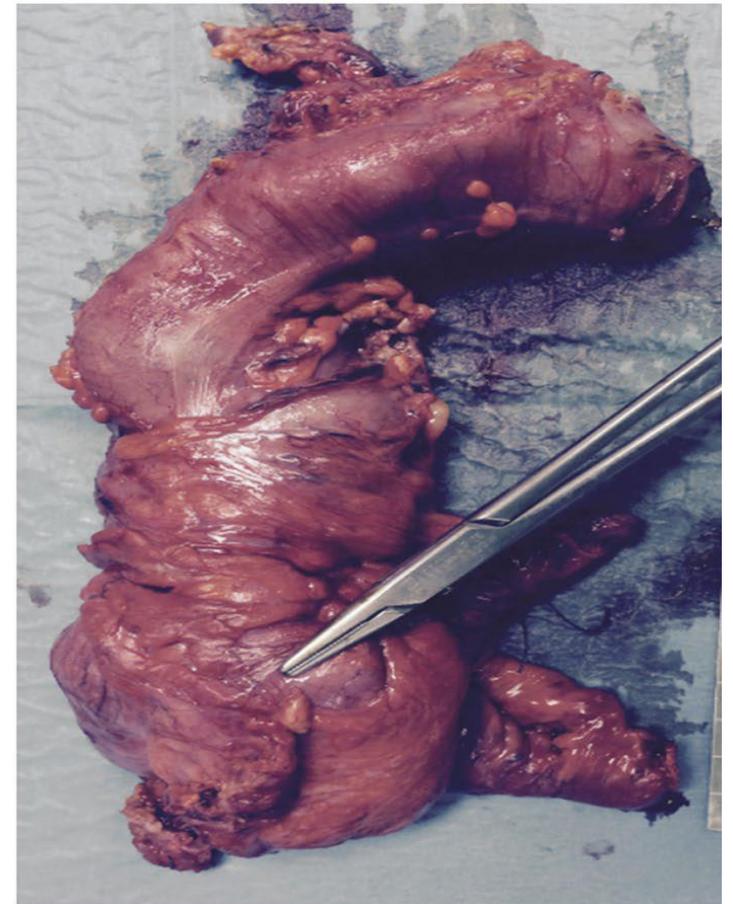
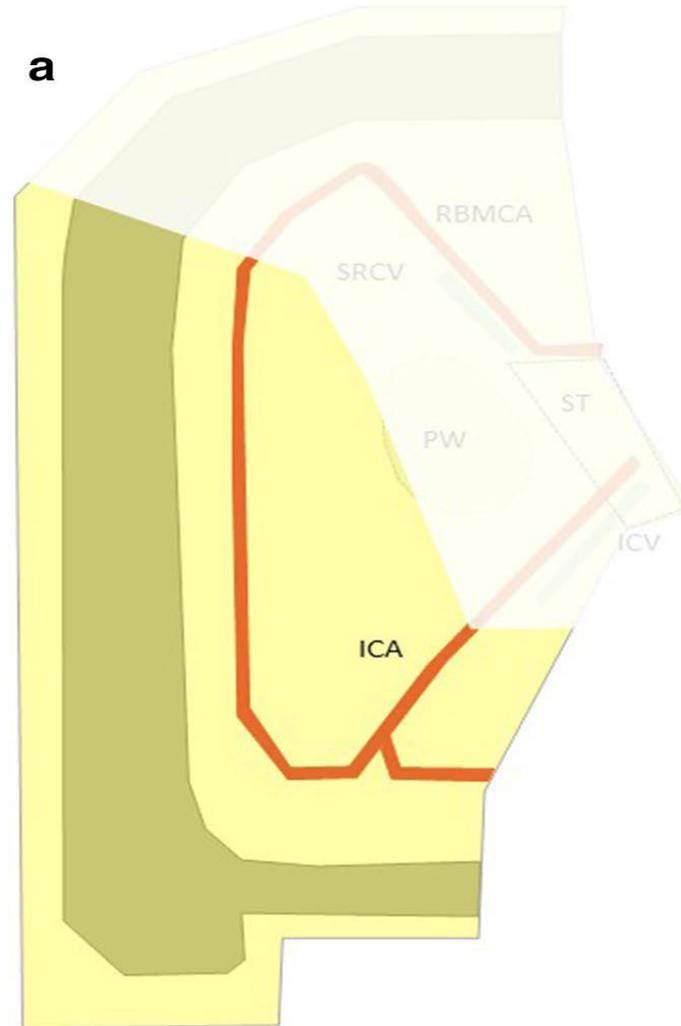
**BENZ Class.:** Schematic view (a) and typical example (b) of *Type II specimen*.  
DA Dissection area, GTH Gastrocolic trunk of Henle, ICA Ileocolic artery, ICV Ileocolic vein, PW Peritoneal window, RBMCA Right branch middle colic artery, SRCV Superior right colic vein, ST Surgical trunk



# BOTTOM UP

## APPROCCIO SOVRAPUBICO PER L'EMICOLECTOMIA DESTRA ROBOTICA NEL CANCRO DEL COLON DESTRO

**BENZ Class.:** Schematic view (a) and typical example (b) of *Type III specimen*.  
DA Dissection area, GTH Gastrocolic trunk of Henle, ICA Ileocolic artery, ICV Ileocolic vein, PW Peritoneal window, RBMCA Right branch middle colic artery, SRCV Superior right colic vein, ST Surgical trunk



*BOTTOM UP*  
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*NEL CANCRO DEL COLON DESTRO*

**Oncological outcomes of open, laparoscopic and robotic colectomy in patients with transverse colon cancer**

Tech Coloproctol 2022 Oct;26(10):821-830.

[V Maertens](#) <sup>1</sup> <sup>2</sup>, [S Stefan](#) <sup>1</sup>, [M Rutgers](#) <sup>1</sup>, [N Siddiqi](#) <sup>1</sup> <sup>3</sup>, [J S Khan](#)

- ***Lymph node harvest was highest in the robotic group vs. laparoscopic or open (32 vs. 29 vs. 21,  $p < 0.001$ ). Overall survival was 97%, 85% and 60% ( $p < 0.001$ ) and disease-free survival was 91%, 78% and 56% ( $p < 0.001$ ) for the robotic, laparoscopic and open groups, respectively***

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**Systematic Review and Meta-Analysis of Laparoscopic versus Robotic-Assisted Surgery for Colon Cancer: Efficacy, Safety, and Outcomes—A Focus on Studies from 2020–2024.**

Roxana Lorian Negrut et al. *Cancers* 2024, 16(8), 1552.

- ***A total of 21 studies met the inclusion criteria, encompassing 50,771 patients, with 21.75% undergoing robotic surgery and 78.25% laparoscopic surgery. A higher number of lymph nodes was harvested by robotic approach (MD = -0.65, p = 0.04).***

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**Conclusioni**

- Bottom up permette una resezione colica dx rispettosa dei principi oncologici di radicalità specifici per il ca colon dx;
- Dissezione Spazi Embriologici più agevole;
- CME completa;
- Disease Free ed Overall Disease significativa;
- Molto performante vs VLS ed approccio robotico SMV First (Top – Down technique);
- Complicanze e tasso conversione estremamente bassi.