

Approccio chirurgico ai tumori della giunzione retto-sigmoidea

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Rectosigmoid cancer

Anatomical definition

A tumor is classified as **rectal** if

- lower margin lies less than 16 cm from the anal verge **or**
- any part of the tumor is located at least partly within the supply of the superior rectal artery

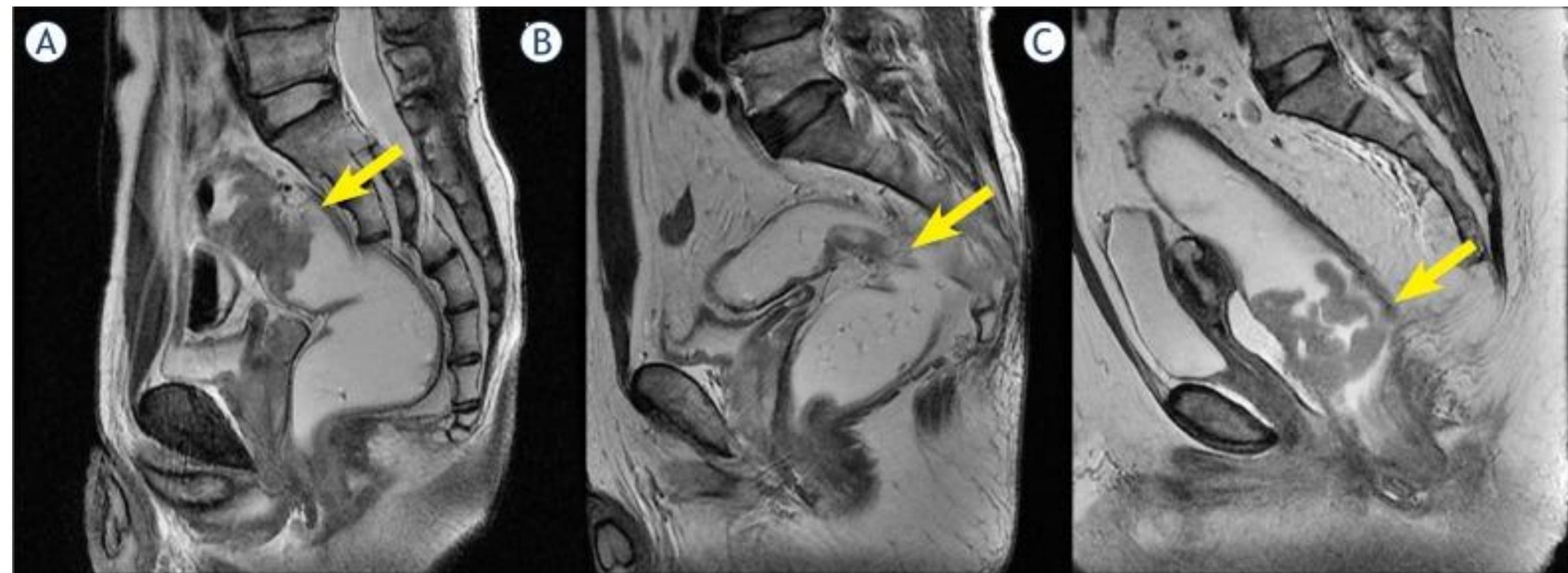
Anatomic Transition from Sigmoid to Rectum

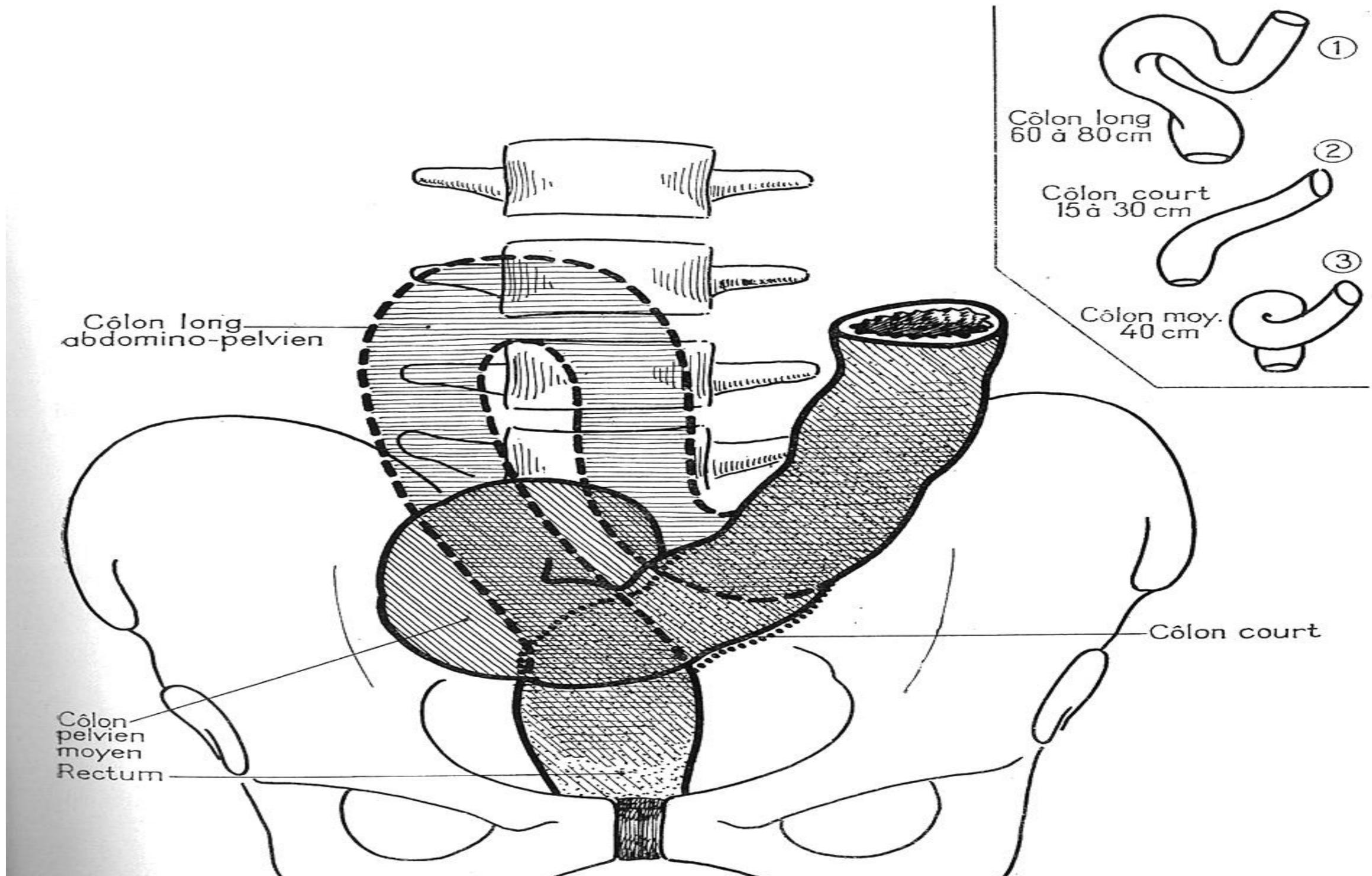
In the sigmoid colon, approximately 12 to 15 cm from the dentate line, the tenia coli fuse to form the circumferential longitudinal muscle of the rectal wall.

Rectosigmoid cancer: radiological definition

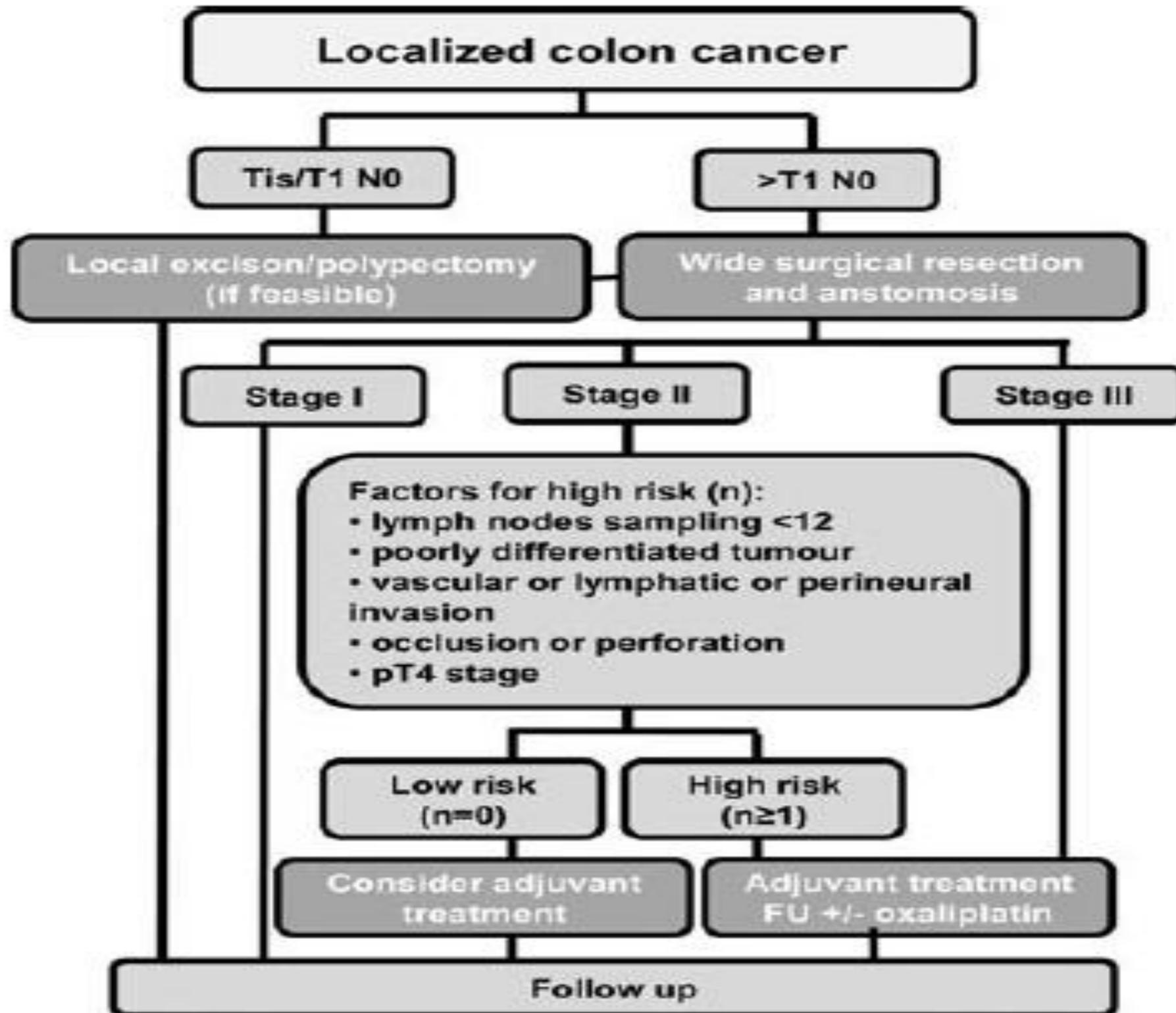
Tumours below peritoneal reflection: RECTAL CANCER

Tumors above peritoneal reflection: SIGMOID CANCER





Rectosigmoid cancer: algorithm



Rectosigmoid cancer: surgical approach

Wide resection of colonic segment containing the tumour

At least 5 cms of proximal and distal colon

Adequate lymphatic resection

Adequate mesocolic excision

To the origin of the vessels (CME)

Rectosigmoid cancer: the surgery

ANTERIOR RESECTION

ANTERIOR RESECTION FOR CANCER OF THE RECTOSIGMOID

J. E. DUNPHY, M.D.
BOSTON

It is well established that abdominoperineal resection in one or more stages is the operation of choice for cancer of the rectum. Less extensive procedures are justifiable only when the radical operation is specifically contraindicated. However, when one is dealing with cancer of the rectosigmoid, the situation is less clear, for it is possible that in selected cases anterior resection of the rectum followed either by anastomosis or by closure of the rectal stump with permanent colostomy may prove equally satisfactory. Anterior resection offers hope of avoiding permanent colostomy and since it is a less extensive procedure, should have a lower operative mortality.

The rectosigmoid is that portion of the large intestine in which the narrow sigmoid colon undergoes a gradual enlargement before joining the rectum. Its exact position is variable. By some it has been estimated to be about 2 inches (5 cm.) above the superior valve of Houston. Others place it as lying opposite the third sacral vertebra. For the purpose of this discussion it may be described as that portion of the pelvic colon in which a neoplasm cannot be delivered sufficiently high to permit a satisfactory end to end anastomosis or Mikulicz resection and yet is not in the ampulla of the rectum. The frequency of malignant lesions in this area is not inconsiderable. Pemberton and Dixon¹ found that 17 per cent of over 3,000 cancers of the colon and the rectum were in the rectosigmoid. Of the 270 patients with cancer of the colon and the rectum admitted to the Peter Bent Brigham Hospital during the five year period covered by this study (1934 to 1939), 24 had the lesion in the rectosigmoid.

There are several anatomic and pathologic factors which make neoplasms in this area worthy of especial consideration. At this point the mesosigmoid becomes shortened, and just below this area it disappears entirely, leaving the bowel with a peritoneal covering on the anterior side only. The blood supply comes from the terminal branches of the

From the Surgical Clinic of the Peter Bent Brigham Hospital.

1. Pemberton, J. de J., and Dixon, C. F.: Summary of End-Results of Treatment of Malignancy of Thyroid Gland and Colon, Including Rectum and Anus, *Surg., Gynec. & Obst.* **58**:462 (Feb., no. 2A) 1934.

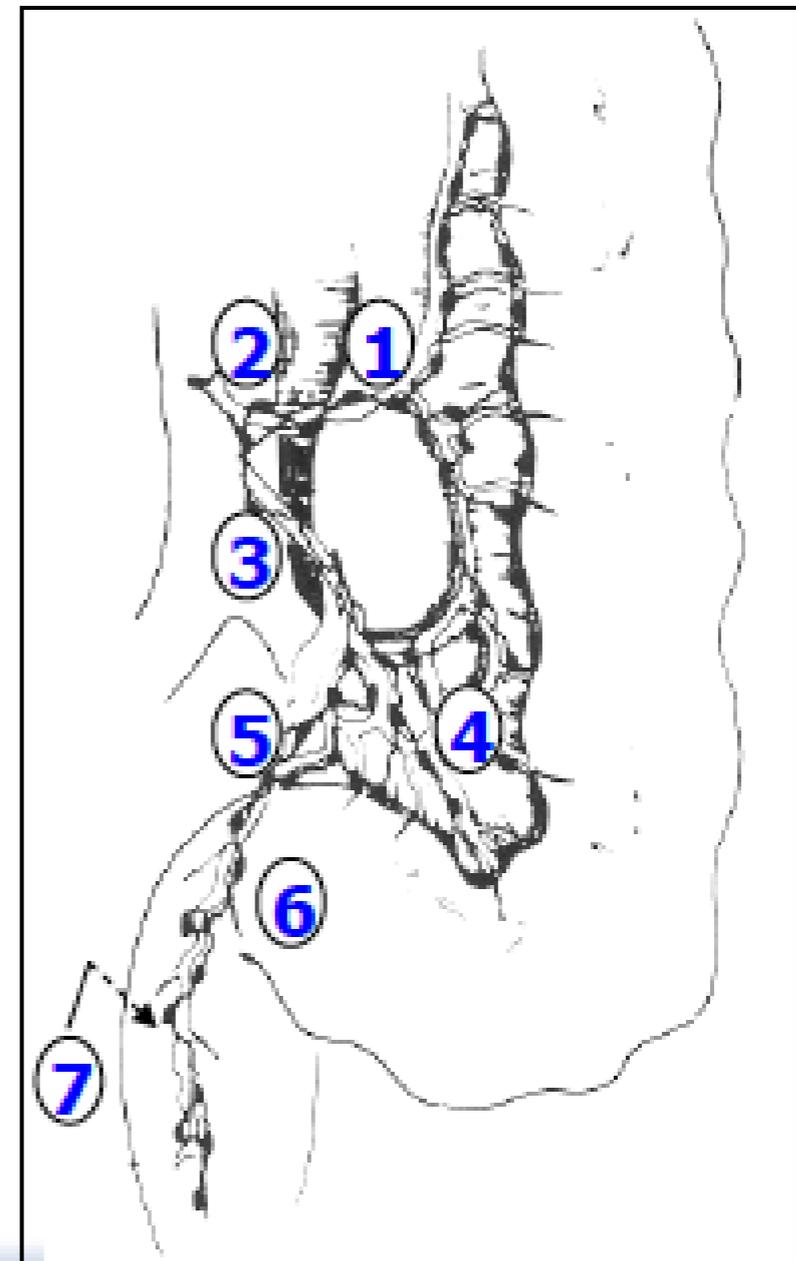
Rectosigmoid cancer: the nodes

Regional nodes for each segment

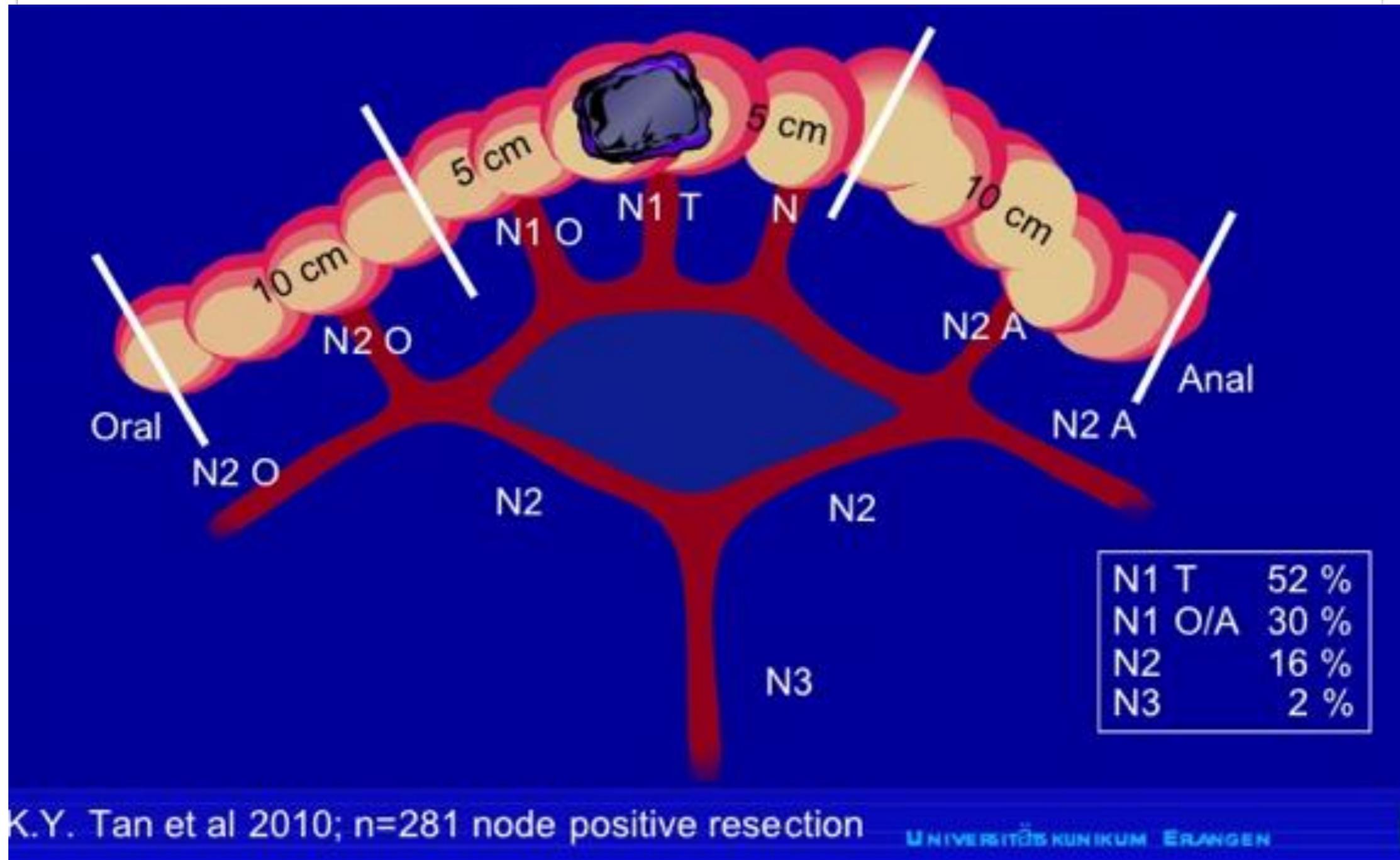
Rectosigmoid: 1, 2, 3, 4, 6

Rectum: 2, 3, 4, 5, 6, 7

- 1 Left colic
- 2 Inferior mesenteric
- 3 Superior rectal (hemorrhoidal)
- 4 Sigmoidal
- 5 Internal iliac
- 6 Middle rectal (hemorrhoidal)
- 7 Sacral (not visible—
posterior to rectum)



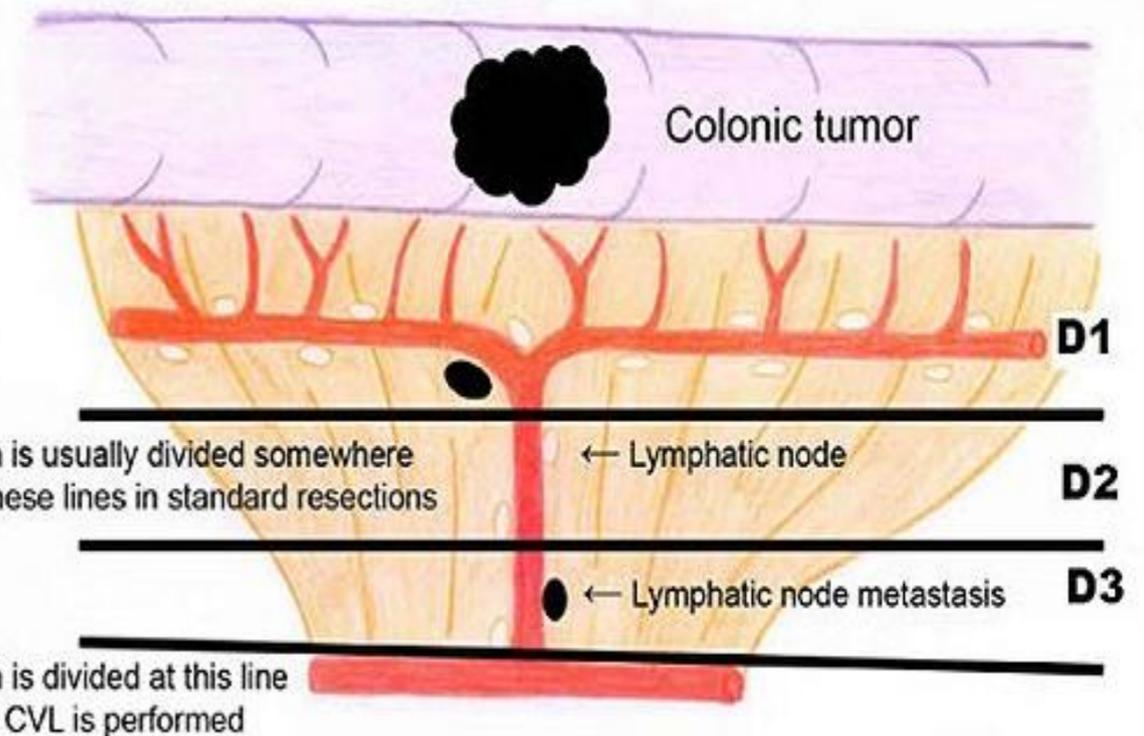
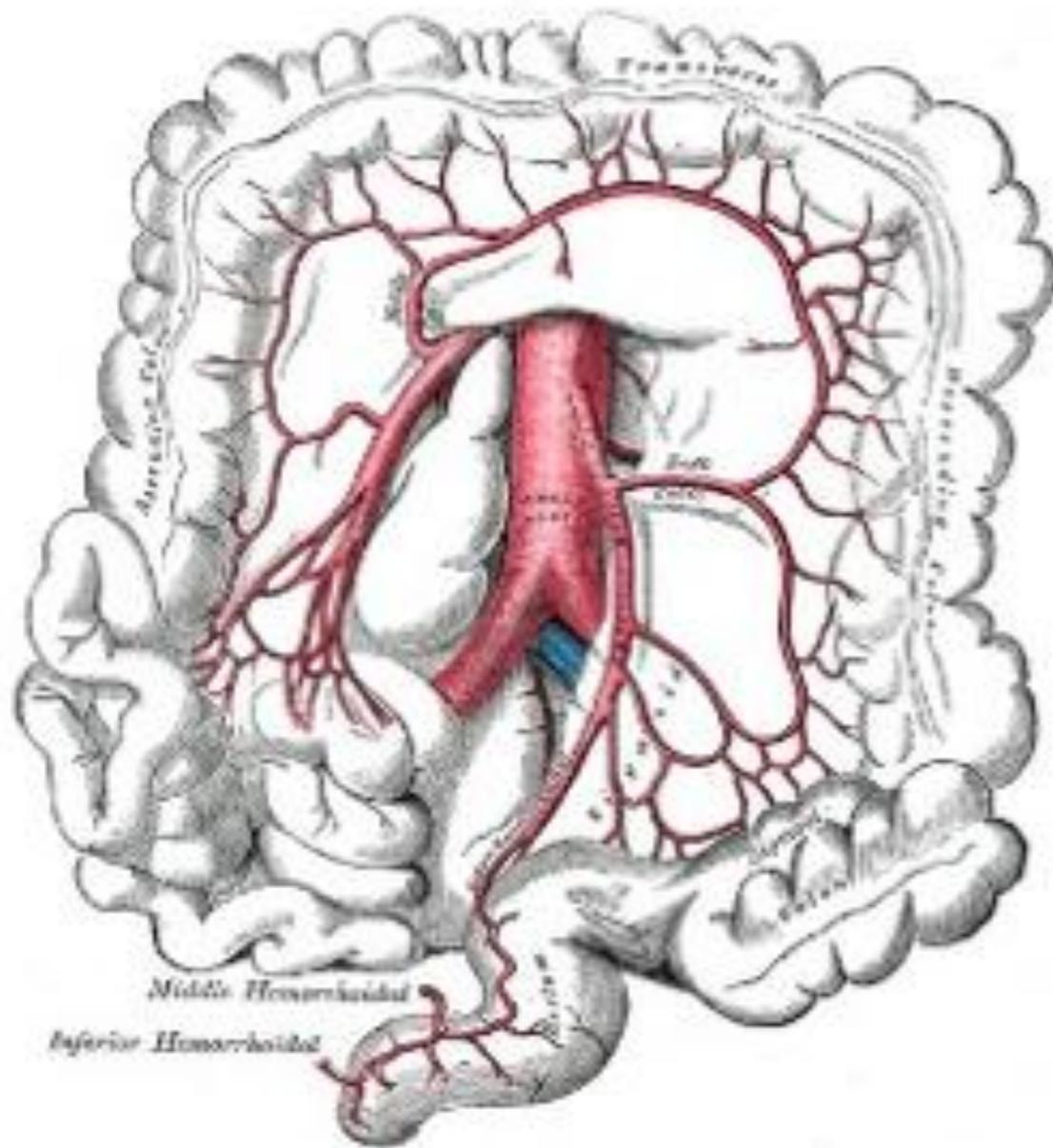
Rectosigmoid cancer: the nodes



Quality of colorectal resection

Intact envelope

The pathologist checks for the quality of the specimen

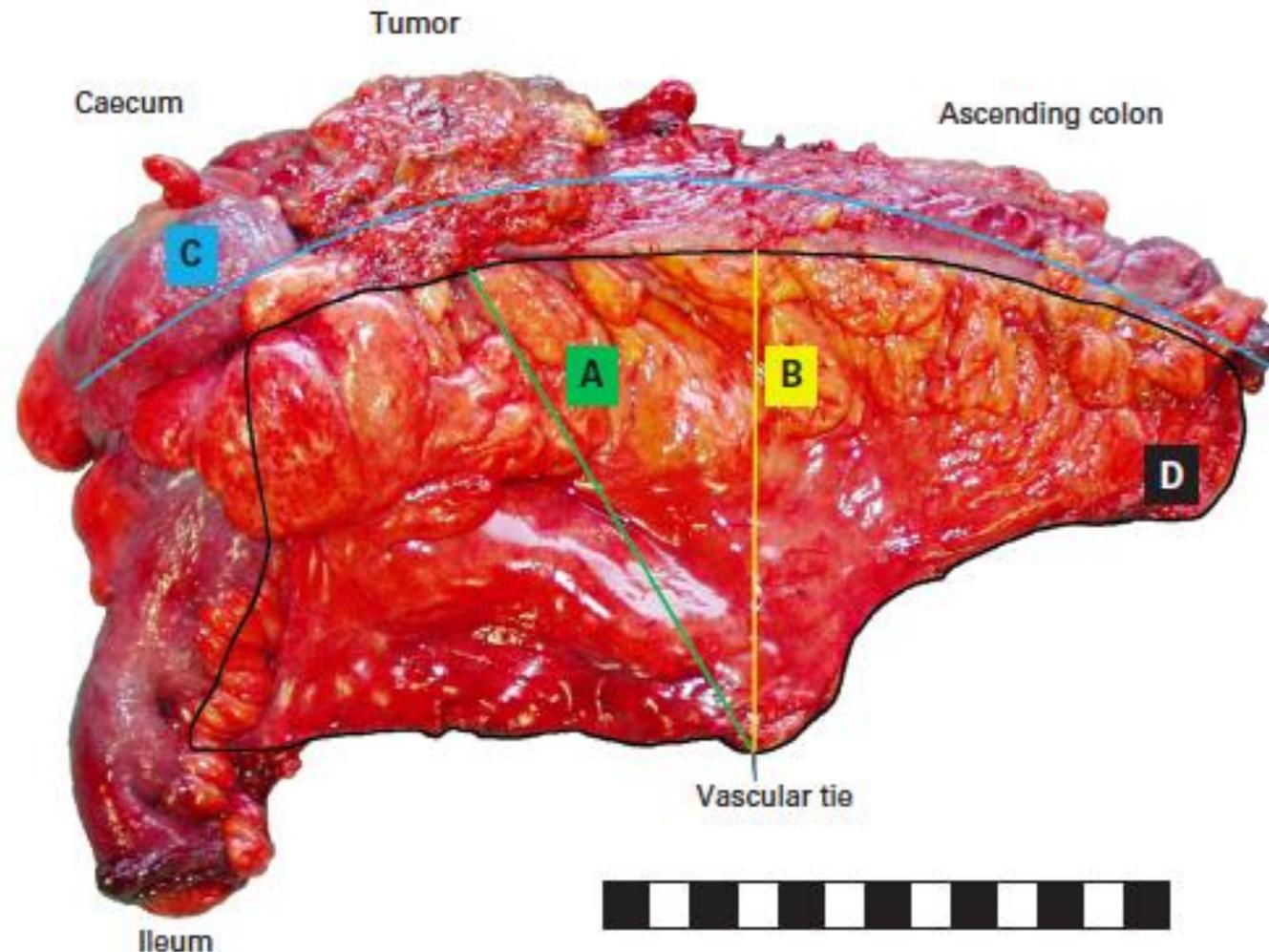


Central Vascular ligation

Rectosigmoid cancer: the nodes

number of l.n.	OS (n=1857)	DFS (n=1857)
0-10 (n=1020)	67%	65%
11-40 (n=807)	74%	70%
>40 (n=30)	93%	90%

The basis of colorectal resection



Adequate length

Intact envelope

TISSUE MORPHOMETRY

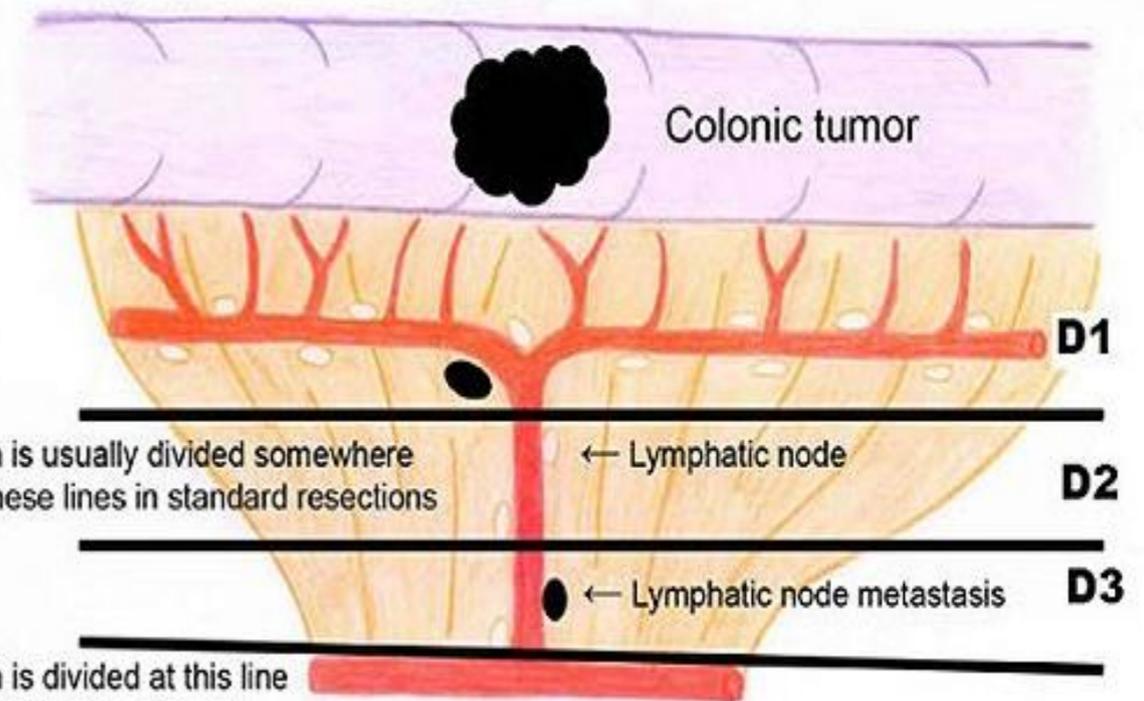
The pathologist checks for the quality of the specimen

Quality of colorectal resection



The intact envelope

The pathologist checks for the quality of the specimen



Central Vascular ligation

Mesocolon is usually divided somewhere between these lines in standard resections

← Lymphatic node

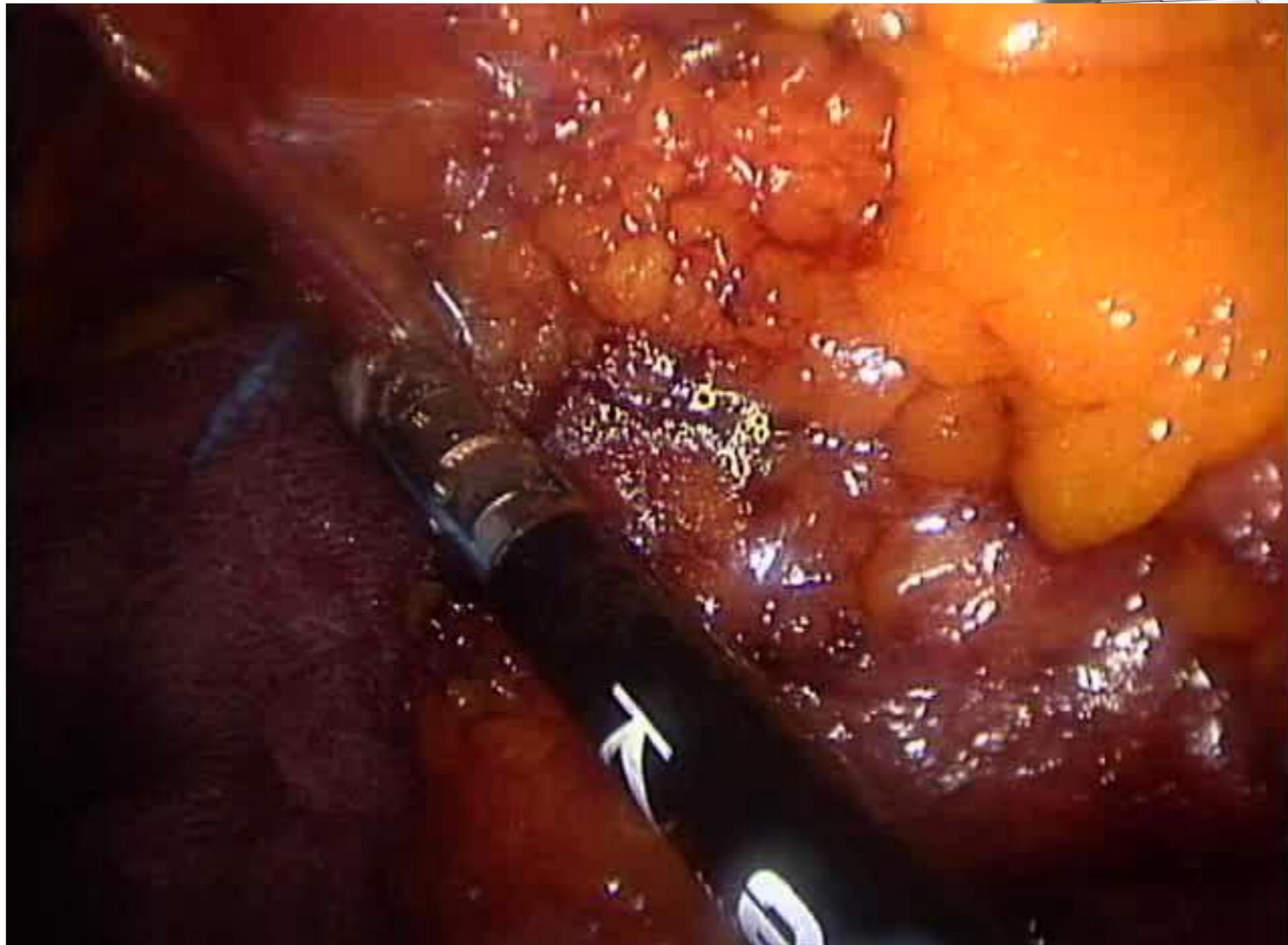
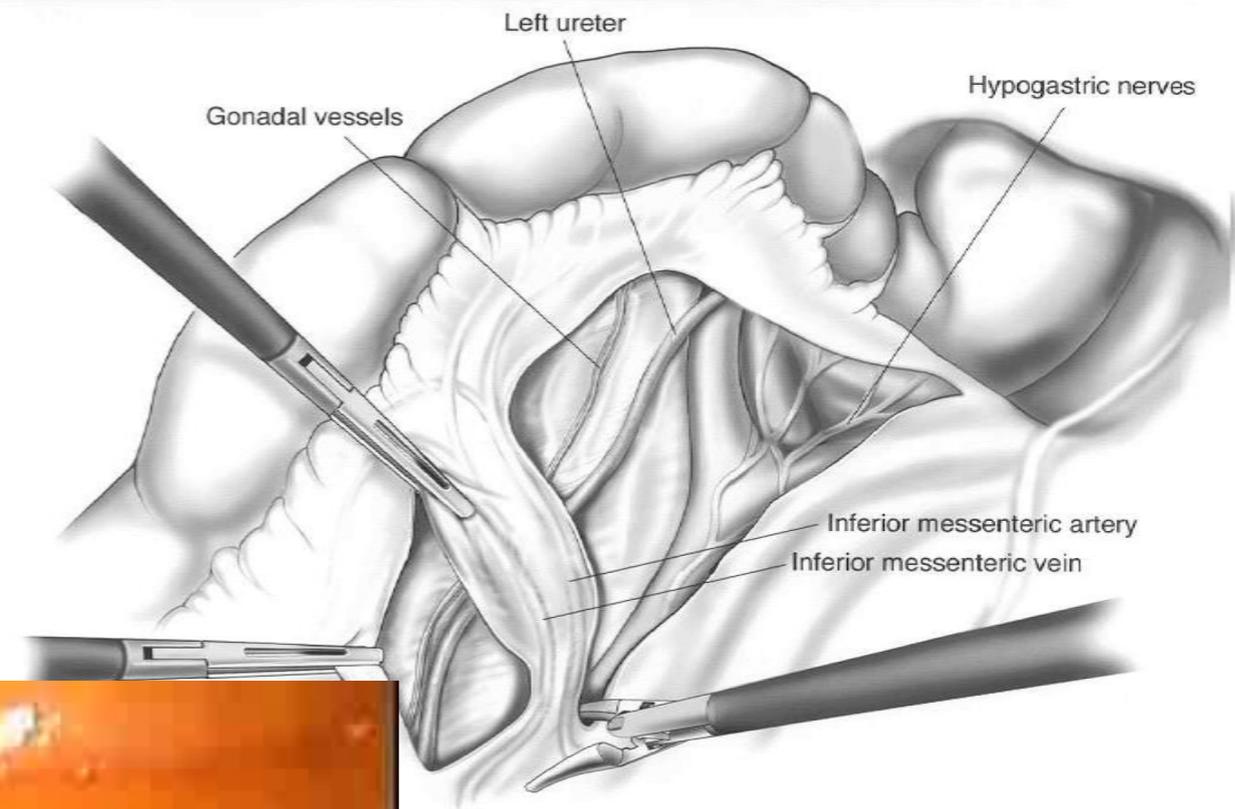
D2

← Lymphatic node metastasis

D3

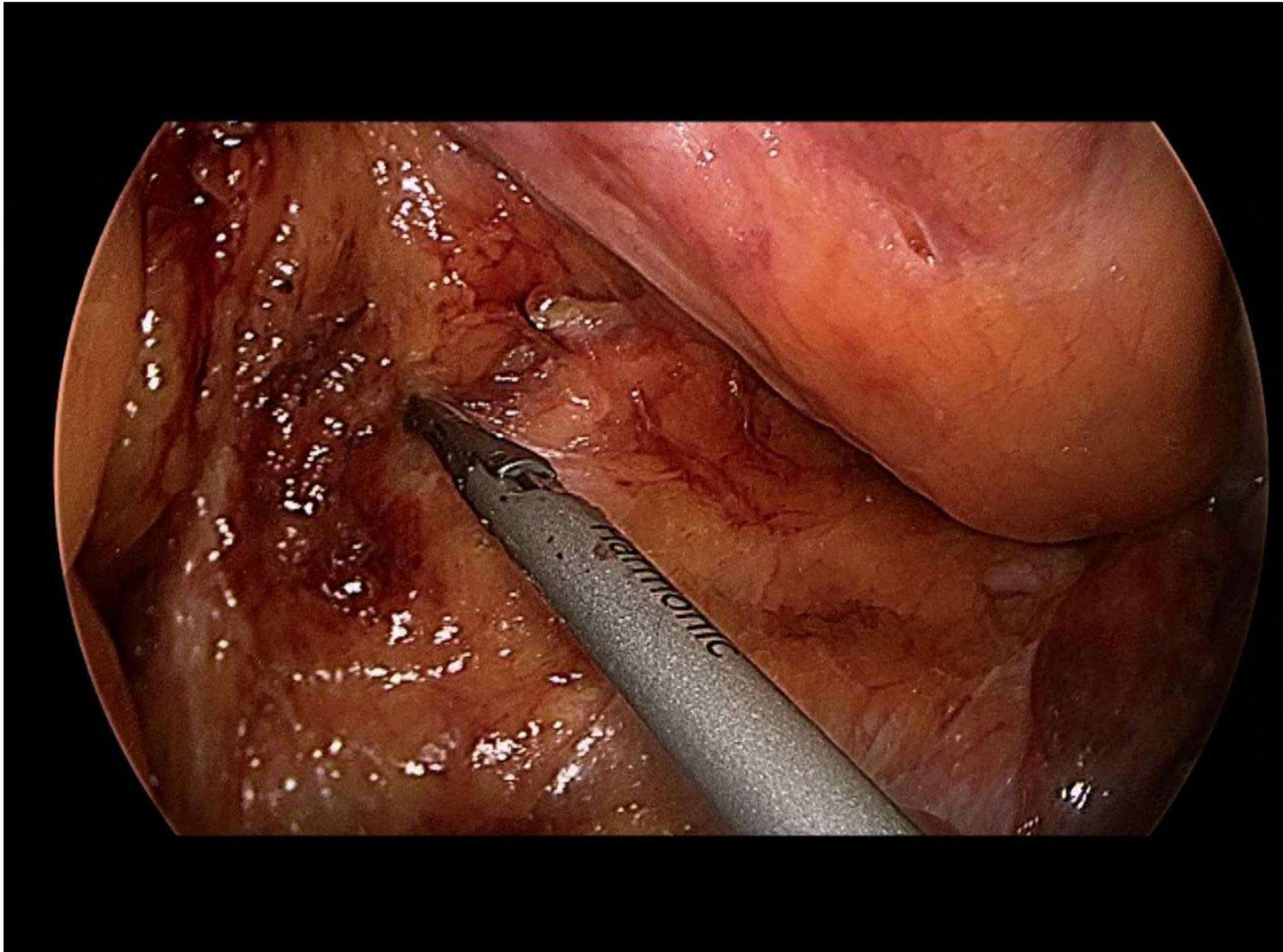
Mesocolon is divided at this line in CME as CVL is performed

Sezione dei vasi



benci arteria vena

MIS and colorectal cancer



New Approaches



Fluorescence

Complications/Prevention

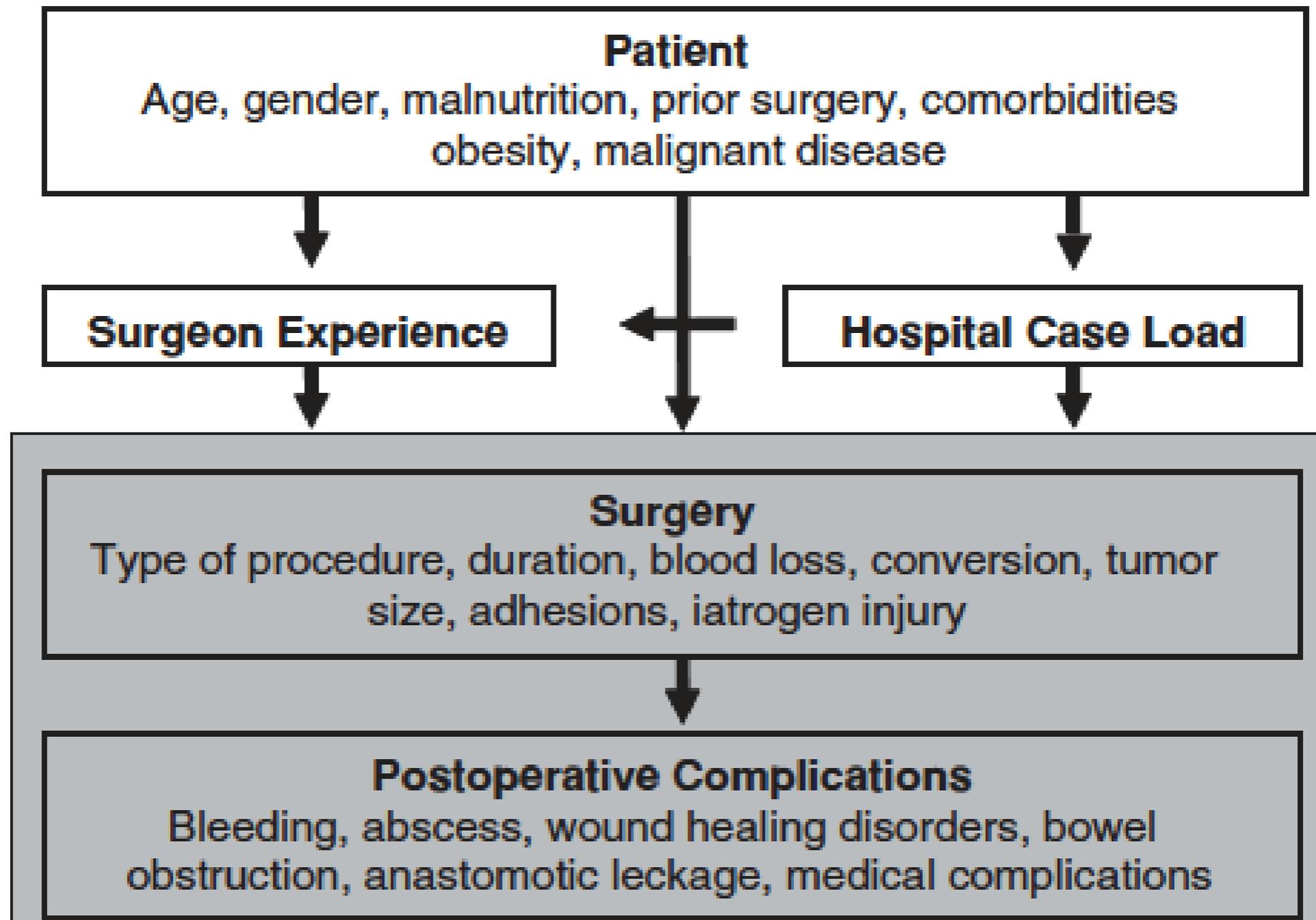


Figure 1 Risk factors and complications in colorectal surgery.

MIS and colorectal cancer

No trial showing superiority of lap over open surgery but equivalence is enough

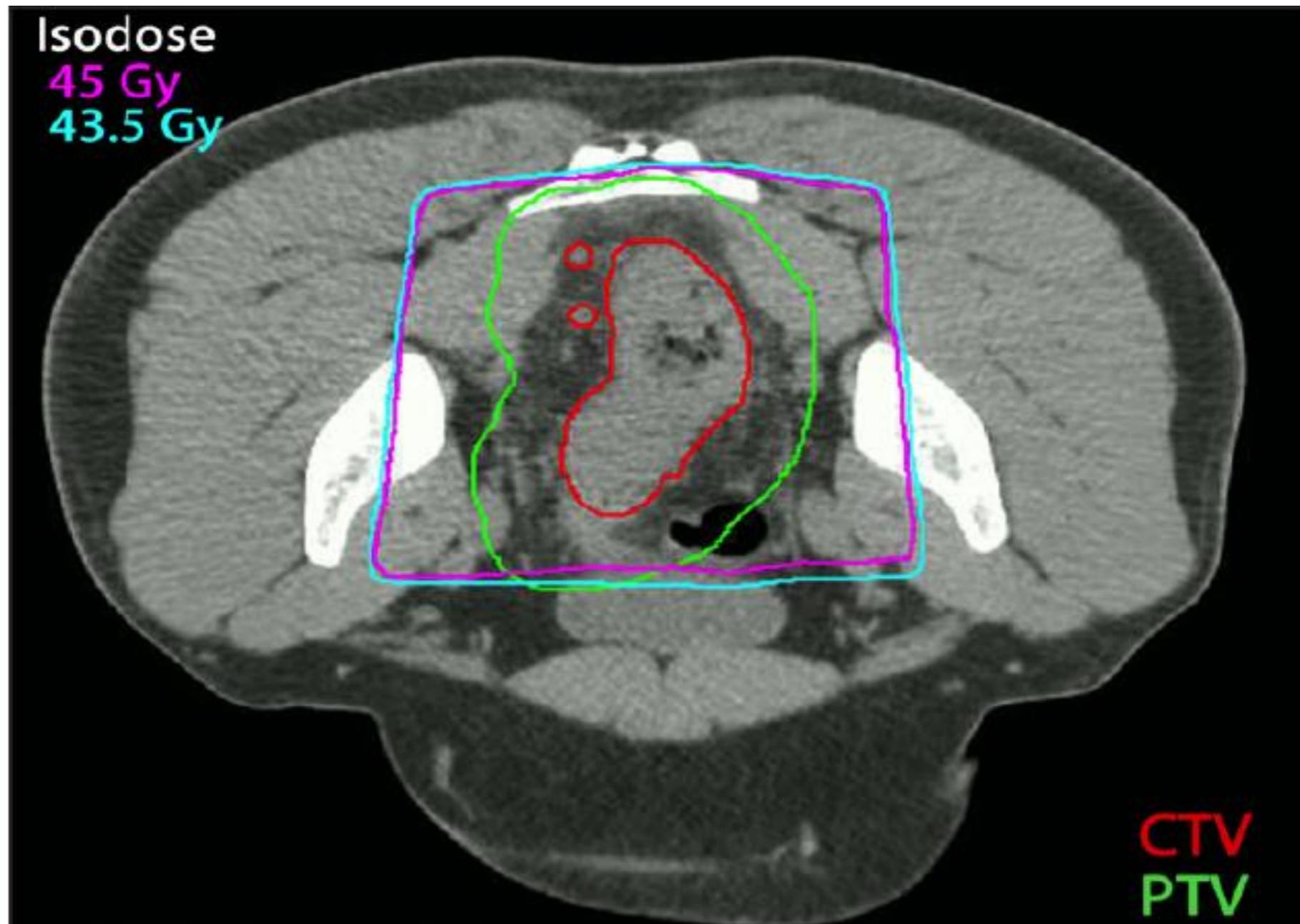
Patients compliance and demand

Market pushes

Eventually in PDTA

High volume centers/MDT approach

New Approaches

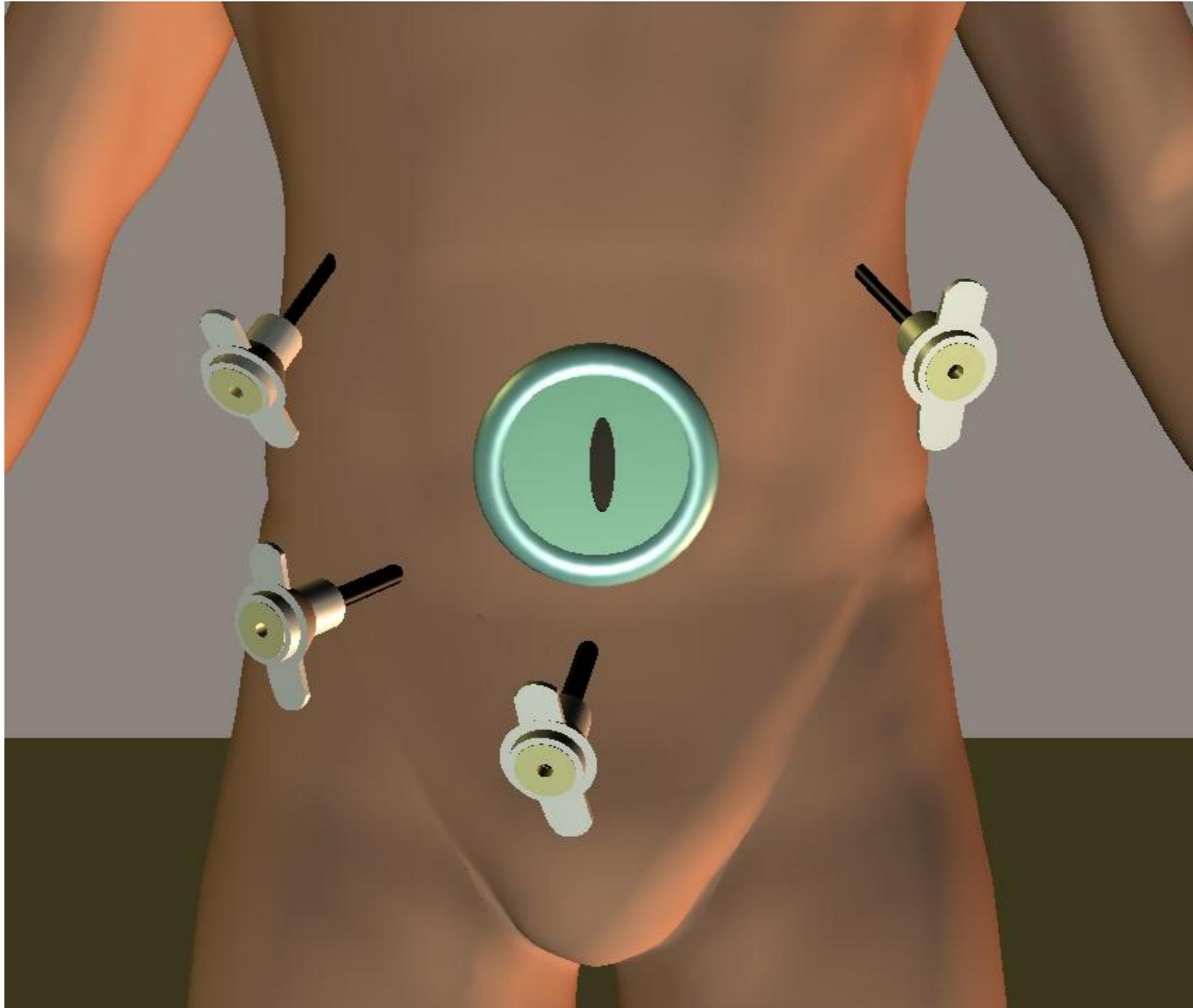


Conclusions

Surgical approach to rectosigmoid cancer is standardized

Accurate report is mandatory to evaluate results

MIS and colorectal cancer



Benefits of Laparoscopic Surgery

- Cosmetic
- Less pain
- Speedier recovery/shorter hospital stay
- Fewer adhesions (scar tissue)
- Fewer wound infections
- Fewer post-operative complications
- Photographs/video/magnified view

Type of anastomosis

No difference among

HS vs stapled

End to End vs Side to End

Single vs Double Layer

Sealed vs naked