II Sessione: Chirurgia oncologica "La presa in carico del paziente oncologico nella ASL Napoli 1 Centro: la ROC, i GOM, la Chirurgia Oncologica e altro"

Presidente: *Corrado Fantini*

Moderatori: *Alberto D'Agostino - Antonietta Fabbrocini - Vincenzo Formisano*

QUALI PERCORSI CHIRURGICI E SPECIALISTICI: LOWER GI

Dott. Gianluca Russo

Napoli SURGERY

NAPOLI 27 – 28 SETTEMBRE

Aula Magna Scuola di Medicina di Scampia
Centro Congressi Università degli Studi di Napoli Federico II
Via Valerio Verbano Snc, Scampia - Napoli

UOC Chirurgia Generale e d'Urgenza
PO dei Pellegrini
Direttore: Dott Corrado Fantini

JAMA Network Open

Original Investigation | Oncology

Colorectal Cancer Stage at Diagnosis Before vs During the COVID-19 Pandemic in Italy

Matteo Rottoli, MD, PhD; Alice Gori, MD; Gianluca Pellino, MD, PhD; Maria Elena Flacco, PhD; Cecilia Martellucci, PhD; Antonino Spinelli, MD, PhD; Gilberto Poggioli, MD; for the COVID-Colorectal Cancer (CRC) Study Group

Table 1. Characteristics of the Sample, Overall and by Period of Surgery

Variable	Overall sample (N = 17 938)	Prepandemic period (January 2018 to February 2020) (n = 10 142)	Pandemic period (March 2020 to December 2021) (n = 7796)	Difference between prepandemic and pandemic periods (95% CI)	*P* value[a]
Primary outcome, No. (%)					
Advanced stage	8841 (49.3)	4929 (48.6)	3912 (50.2)	−1.5 (−3.1 to −0.1)	.04
Secondary outcomes, No. (%)					
Distant metastasis	2583 (14.4)	1411 (13.9)	1172 (15.0)	−1.1 (−2.2 to −0.1)	.03
T4	1450 (8.1)	758 (7.5)	692 (8.9)	−1.4 (−2.2 to −0.6)	.001
Stenotic lesion	2611 (14.6)	1396 (13.8)	1215 (15.6)	−1.8 (−2.9 to −0.8)	.001
Urgent surgery	2025 (11.3)	1076 (10.6)	949 (12.2)	−1.6 (−2.5 to −0.6)	.001
Palliative surgery	1379 (7.7)	735 (7.3)	644 (8.3)	−1.0 (−1.8 to −0.2)	.01
Aggressive biology, No./total No. (%)	12 207/17 446 (70.0)	6656/9874 (67.4)	5551/7572 (73.3)	−5.9 (−7.3 to −4.5)	<.001

Abbreviations: AJCC, American Joint Committee on Cancer; BMI, body mass index (calculated as weight in kilograms divided by height in meters squared).

[a] *t* Test and χ^2 test for continuous and categorical variables, respectively.

[b] *P* value for trend.

[c] No stage included cancers that were not removed by palliative surgery or that had a pathologic complete response after neoadjuvant therapy.

Incremento statisticamente significativo dei pazienti in stadio di malattia avanzata nel periodo post-pandemico per mancato screening

CRC epidemiology

Incidenza

Rango	Maschi	Femmine	Tutta la popolazione
1°	Prostata (19%)	Mammella (30%)	Mammella (14%)
2°	Polmone (15%)	Colon-retto (12%)	Colon-retto (13%)
3°	Colon-retto (14%)	Polmone (12%)	Polmone (11%)
4°	Vescica* (12%)	Tiroide (5%)	Prostata (10%)
5°	Stomaco (4%)	Utero corpo (5%)	Vescica* (8%)

TABELLA 6. Primi cinque tumori più frequentemente diagnosticati e proporzione sul totale dei tumori (esclusi

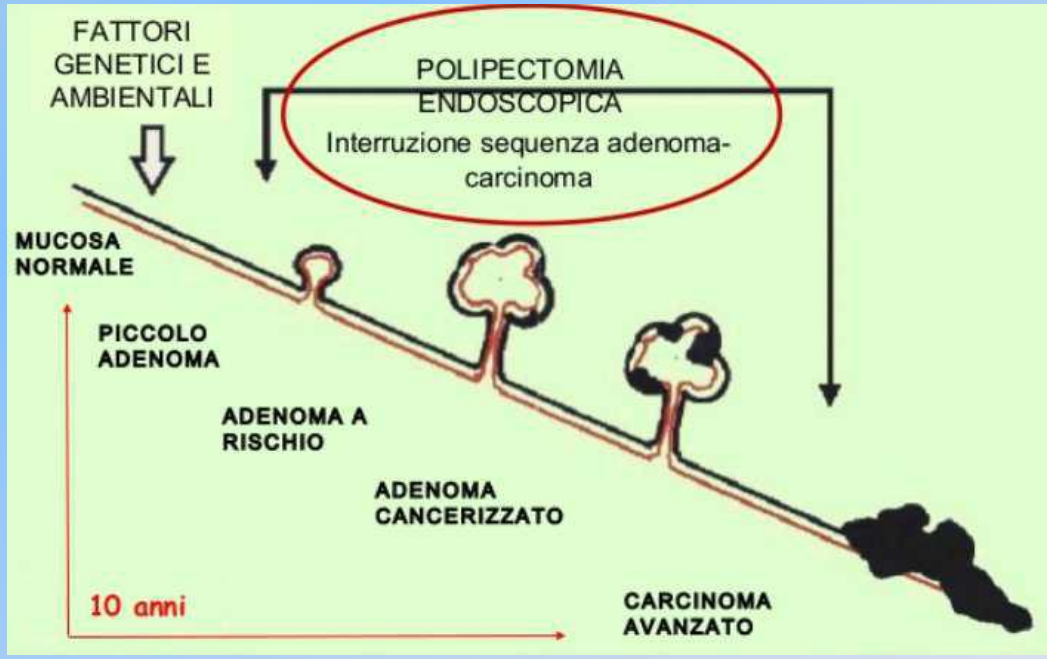
Mortalità per tumore

Rango	Maschi	Femmine	Tutta la popolazione
1°	Polmone (27%)	Mammella (17%)	Polmone (12%)
2°	Colon-retto (11%)	Colon-retto (12%)	Colon-retto (7%)
3°	Prostata (8%)	Polmone (11%)	Mammella (4%)
4°	Fegato (7%)	Pancreas (8%)	Pancreas (4%)
5°	Stomaco (6%)	Stomaco (6%)	Fegato (4%)

TABELLA 9. Prime cinque cause di morte oncologica e proporzione sul totale dei decessi oncologici per sesso. Pool AIRTUM 2010-2015

Razionale dello SCREENING

Circa l'80% dei carcinomi del colon retto insorge a partire da lesioni precancerose (adenomi con componente displastica via via crescente)



Lo **screening ha come obiettivo primario la riduzione della mortalità, da** raggiungere attraverso la diagnosi dei tumori in fase precoce, ma anche una riduzione della incidenza della malattia

CRC PREVENZIONE SECONDARIA

CA Cancer J Clin. 2018 May 30. doi: 10.3322/caac.21457. [Epub ahead of print]

Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society.

Wolf AMD[1], Fontham ETH[2], Church TR[3], Flowers CR[4], Guerra CE[5], LaMonte SJ[6], Etzioni R[7], McKenna MT[8], Oeffinger KC[9], Shih YT[10], Walter LC[11], Andrews KS[12], Brawley OW[13], Brooks D[14], Fedewa SA[15], Manassaram-Baptiste D[12], Siegel RL[16], Wender RC[17], Smith RA[18].

Author information

Abstract

In the United States, colorectal cancer (CRC) is the fourth most common cancer diagnosed among adults and the second leading cause of death from cancer. For this guideline update, the American Cancer Society (ACS) used an existing systematic evidence review of the CRC screening literature and microsimulation modeling analyses, including a new evaluation of the age to begin screening by race and sex and additional modeling that incorporates changes in US CRC incidence. Screening with any one of multiple options is associated with a significant reduction in CRC incidence through the detection and removal of adenomatous polyps and other precancerous lesions and with a reduction in mortality through incidence reduction and early detection of CRC. Results from modeling analyses identified efficient and model-recommendable strategies that started screening at age 45 years. The ACS Guideline Development Group applied the Grades of Recommendations, Assessment, Development, and Evaluation (GRADE) criteria in developing and rating the recommendations. The ACS recommends that adults aged 45 years and older with an average risk of CRC undergo regular screening with either a high-sensitivity stool-based test or a structural (visual) examination, depending on patient preference and test availability. As a part of the screening process, all positive results on noncolonoscopy screening tests should be followed up with timely colonoscopy. The recommendation to begin screening at age 45 years is a qualified recommendation. The recommendation for regular screening in adults aged 50 years and older is a strong recommendation. The ACS recommends (qualified recommendations) that: 1) average-risk adults in good health with a life expectancy of more than 10 years continue CRC screening through the age of 75 years; 2) clinicians individualize CRC screening decisions for individuals aged 76 through 85 years based on patient preferences, life expectancy, health status, and prior screening history; and 3) clinicians discourage individuals older than 85 years from continuing CRC screening. The options for CRC screening are: fecal immunochemical test annually; high-sensitivity, guaiac-based fecal occult blood test annually; multitarget stool DNA test every 3 years; colonoscopy every 10 years; computed tomography colonography every 5 years; and flexible sigmoidoscopy every 5 years. CA Cancer J Clin 2018;000:000-000.

secondaria consiste nella precoce identificazione di lesioni preneoplastiche la cui eliminazione previene la formazione di una neoplasia (screening)

PERCORSO PER SEGMENTAZIONE

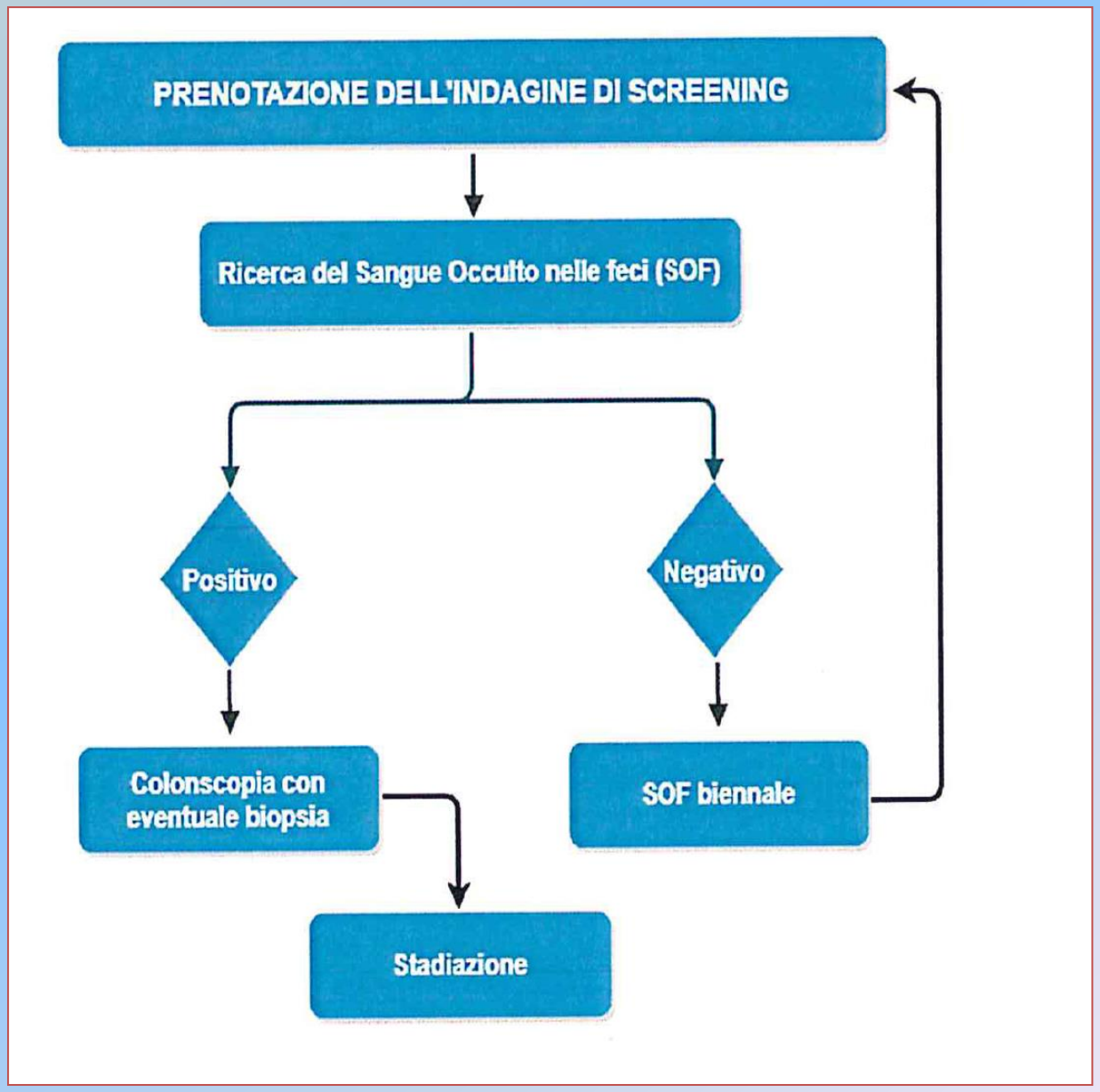
-Screening con ricerca del sangue occulto nelle feci (SOF) per soggetti asintomatici

-Percorso diagnostico per pazienti con sospetta neoplasia colon-rettale

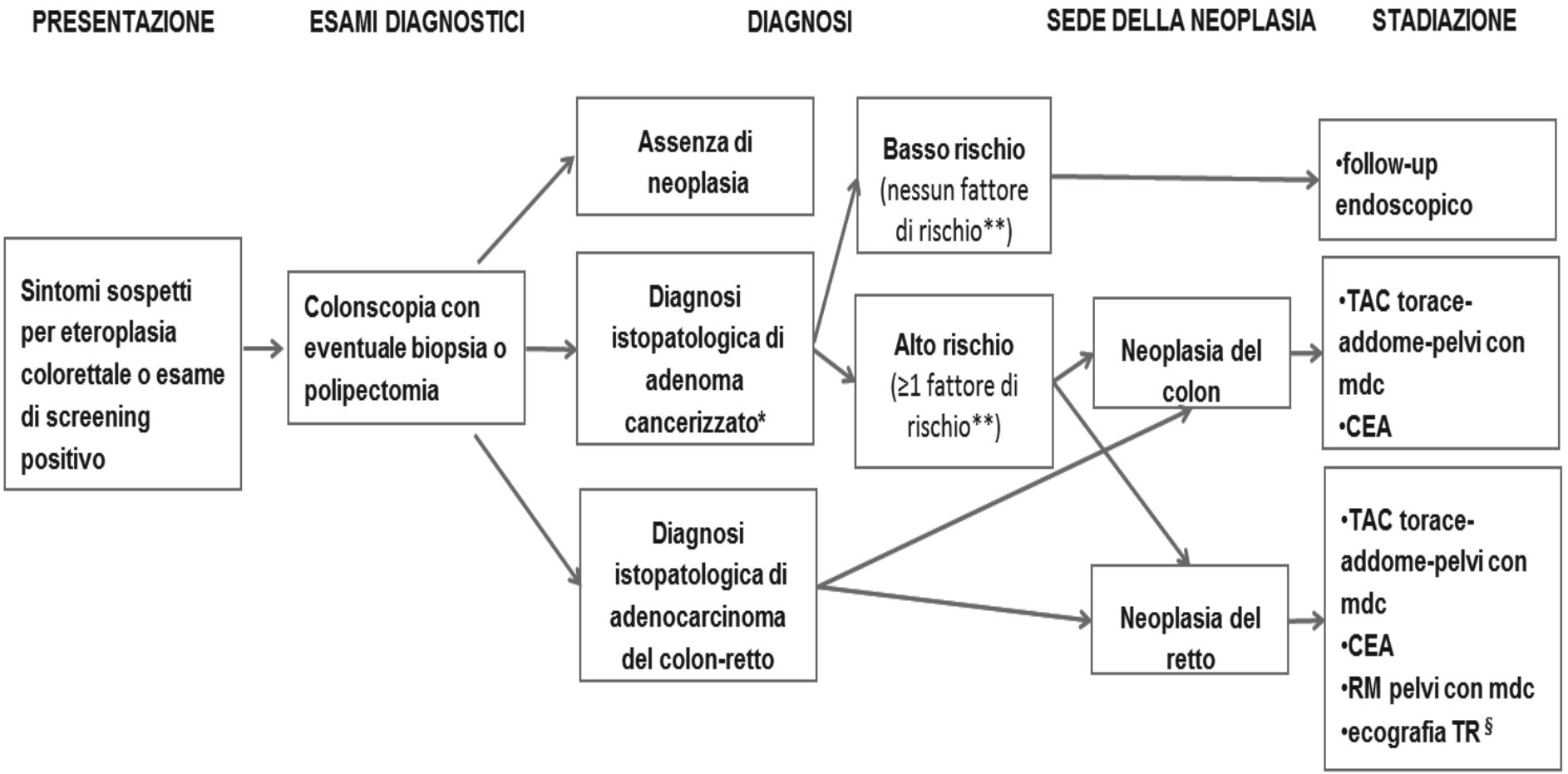
-Percorso stadiativo/terapeutico per pazienti con neoplasia colon-rettale accertata

- Follow-up per pazienti con pregressa neoplasia colon-rettale

Percorso dello screening colo-rettale



DIAGNOSI E STADIAZIONE

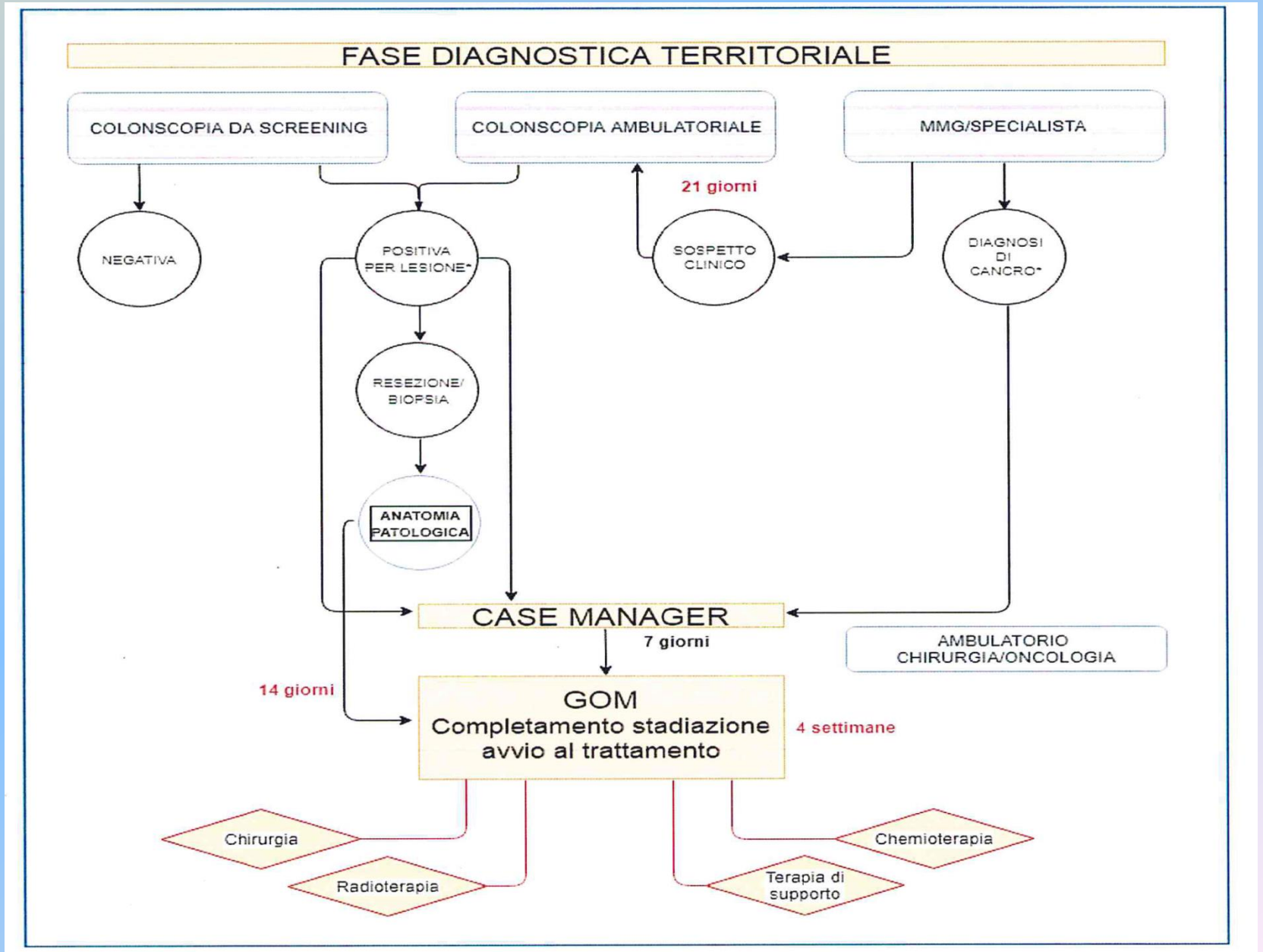


*rivalutare il caso da un secondo operatore all'interno dello stesso servizio di anatomia

**fattori di rischio: margine di resezione (positivo o <1mm vs ≥1mm), invasione linfovascolare (presente vs assente), grado di differenziazione (G1-2 vs G3-4), tumor budding (assente o basso grado vs presente o alto grado), grado di infiltrazione della sottomucosa sec. Kikuchi [in caso di polipo sessile] (sm1 vs sm2 o sm3)

§ negli stadi iniziali cT1-2 e nei tumori del retto basso (esame complementare alla RM pelvica

Percorso stadiativo/terapeutico per pazienti con neoplasia colo-rettale accertata



-Completamento delle procedure stadiative entro 2 settimane dalla diagnosi di certezza istologica

-Valutazione del polimorfismo DPYD obbligatoria per i pazienti candidati a terapia con fluoropirimidine.

-Sospetta ereditarietà: il GOM dovrà valutare l'opportunità di un counseling oncogenetico.

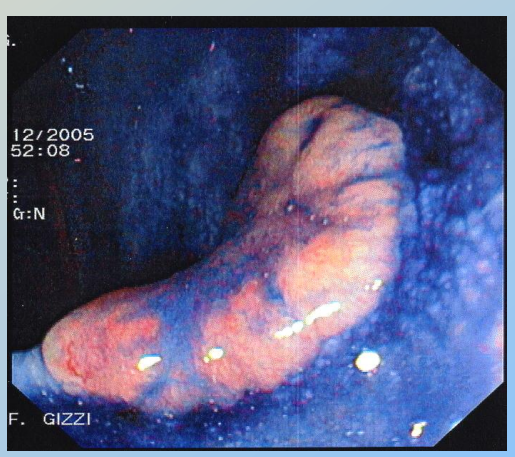
-Valutazione dell'opportunità di un counseling psicologico e della necessità di un supporto nutrizionale mediante l'utilizzo di un sistema di screening dello stato di malnutrizione (MUST).

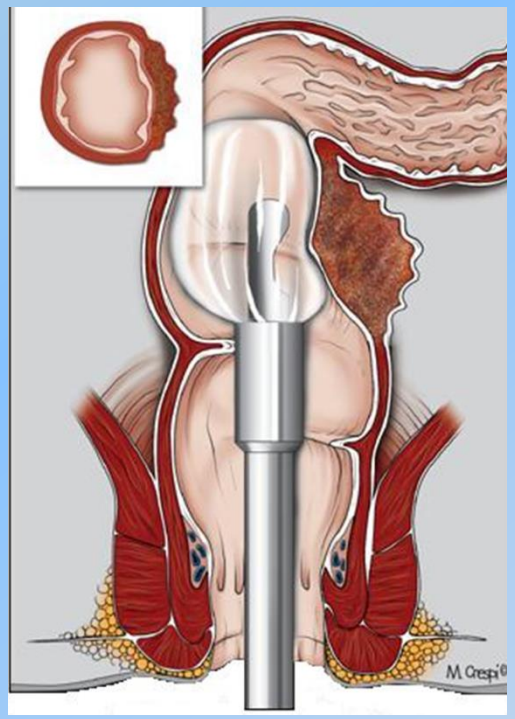
-Nei pazienti in età fertile con necessità di trattamenti chemioterapici il GOM valuterà la necessità di un counseling di oncofertilità

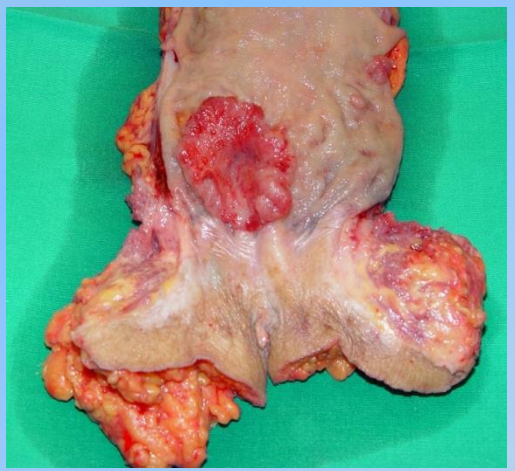
CRC diagnosi

-Colonscopia completa
-TAC con mdc: Torace Addome e pelvi
-RMN per i tumori del retto extraperitoneale (<12 cm dal margine anale)
-Ecografia transrettale per i tumori del retto extraperitoneale (<12 cm dal margine anale)
-Esami di laboratorio:
Emocromo, coagulazione, parametri di funzionalità epatica e renale, albumina
-CEA
-PET solo in pazienti con malattia localmente avanzata o metastasi candidate a resezione

ROLE OF ERUS IN RECTAL CANCER STAGING

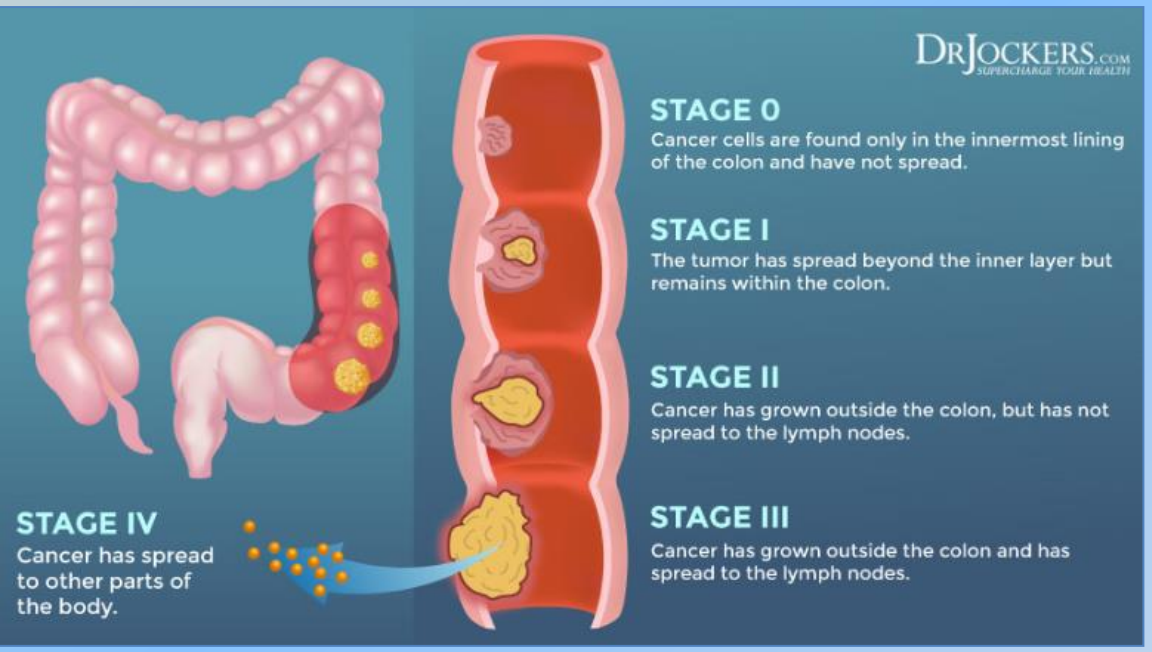






- To define T and N stages
- To select patients for LE
- To select patients for TME
- To select patients for Preop. RT-CMT
- To restage tumors after neoadiuvant treatment

TNM



TNM Staging System for Colon Cancer 8th ed., 2017

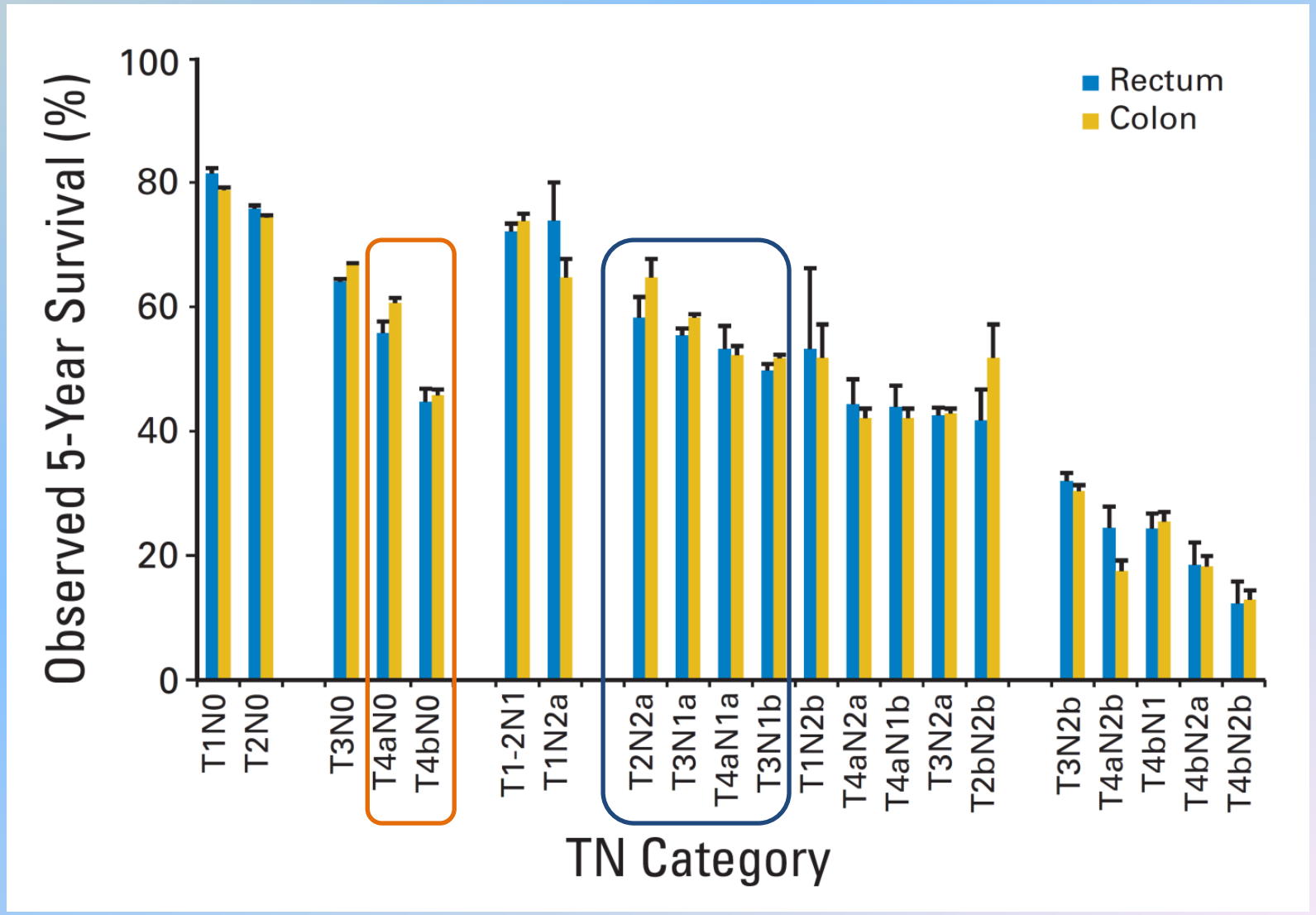
***Table 2.* Prognostic Groups**

	T	N	M
Stage 0	Tis	N0	M0
Stage I	T1, T2	N0	M0
Stage IIA	T3	N0	M0
Stage IIB	T4a	N0	M0
Stage IIC	T4b	N0	M0
Stage IIIA	T1-T2	N1/N1c	M0
	T1	N2a	M0
Stage IIIB	T3-T4a	N1/N1c	M0
	T2-T3	N2a	M0
	T1-T2	N2b	M0
Stage IIIC	T4a	N2a	M0
	T3-T4a	N2b	M0
	T4b	N1-N2	M0
Stage IVA	Any T	Any N	M1a
Stage IVB	Any T	Any N	M1b
Stage IVC	Any T	Any N	M1c

5-year survival rates after surgical resection alone:
99% for stage I
68%–83% for stage II
45%–65% for stage III disease

AJCC Cancer Staging Manual, Eighth Edition (2017)

Prognosis based on TN-STAGE



Dopo la chirurgia, il paziente verrà sottoposto ad una nuova visita oncologica per decidere il proseguo terapeutico sulla base della diagnosi istopatologica (pTNM):

- nei tumori del colon in stadio I e II di malattia senza fattori di rischio, il paziente proseguirà soltanto con visite di follow up;

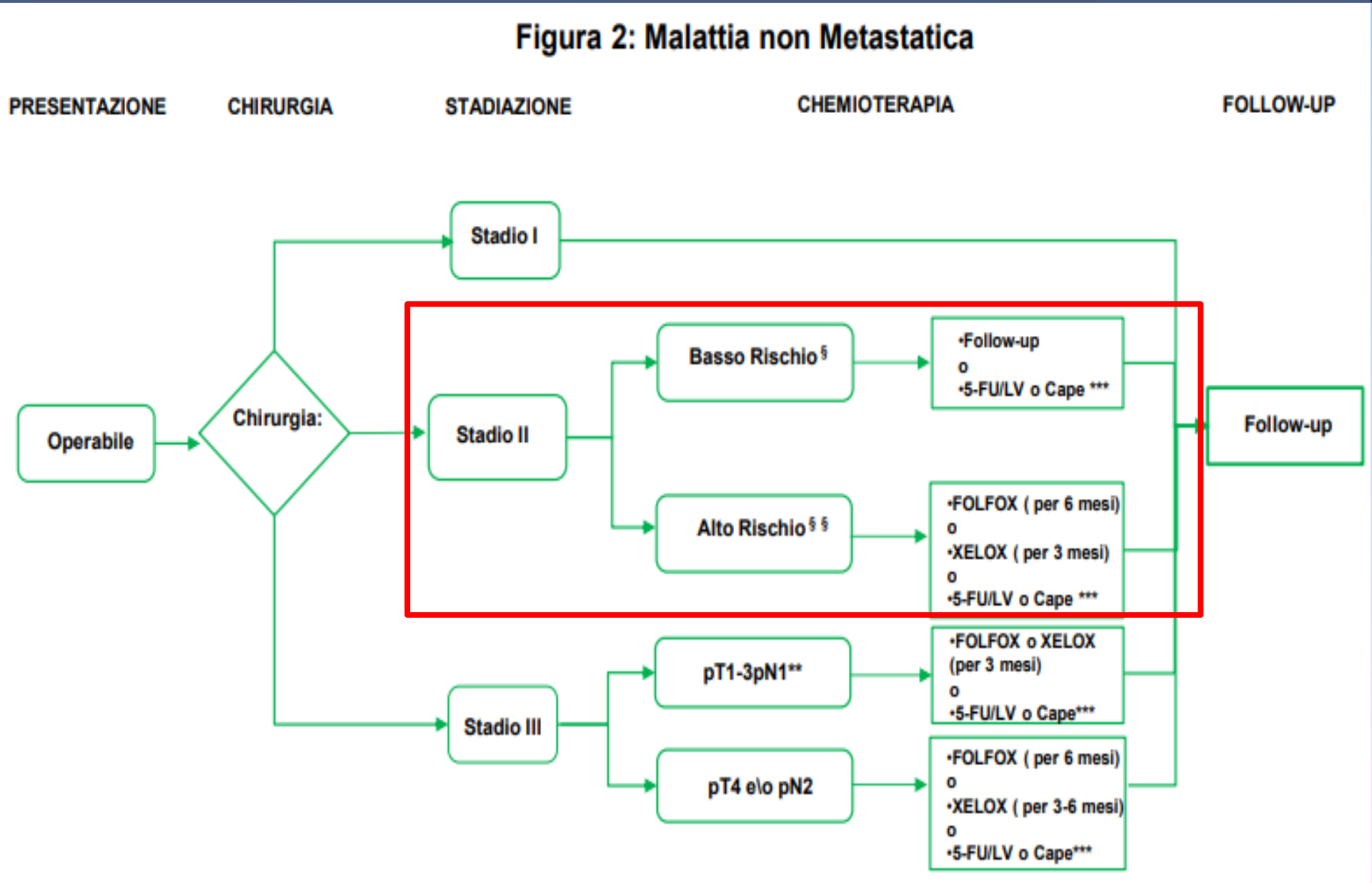
- nei tumori del colon in stadio II con almeno un fattore di rischio (T4, grading G3, invasione vascolare e/o perineurale, meno di 12 linfonodi asportati, esordio clinico con occlusione/perforazione) e stadio III, il paziente è candidato a ricevere un trattamento postoperatorio precauzionale (chemioterapia adiuvante) al fine di ridurre il rischio di recidiva della malattia

Il trattamento standard prevede l'utilizzo di fluoro-pirimidine (capecitabina o 5-fluorouracile) in associazione ad oxaliplatino, da intraprendere dopo 4 e sino ad un massimo di 8 settimane dopo la chirurgia, per una durata complessiva di circa 3-6 mesi, secondo i seguenti schemi:

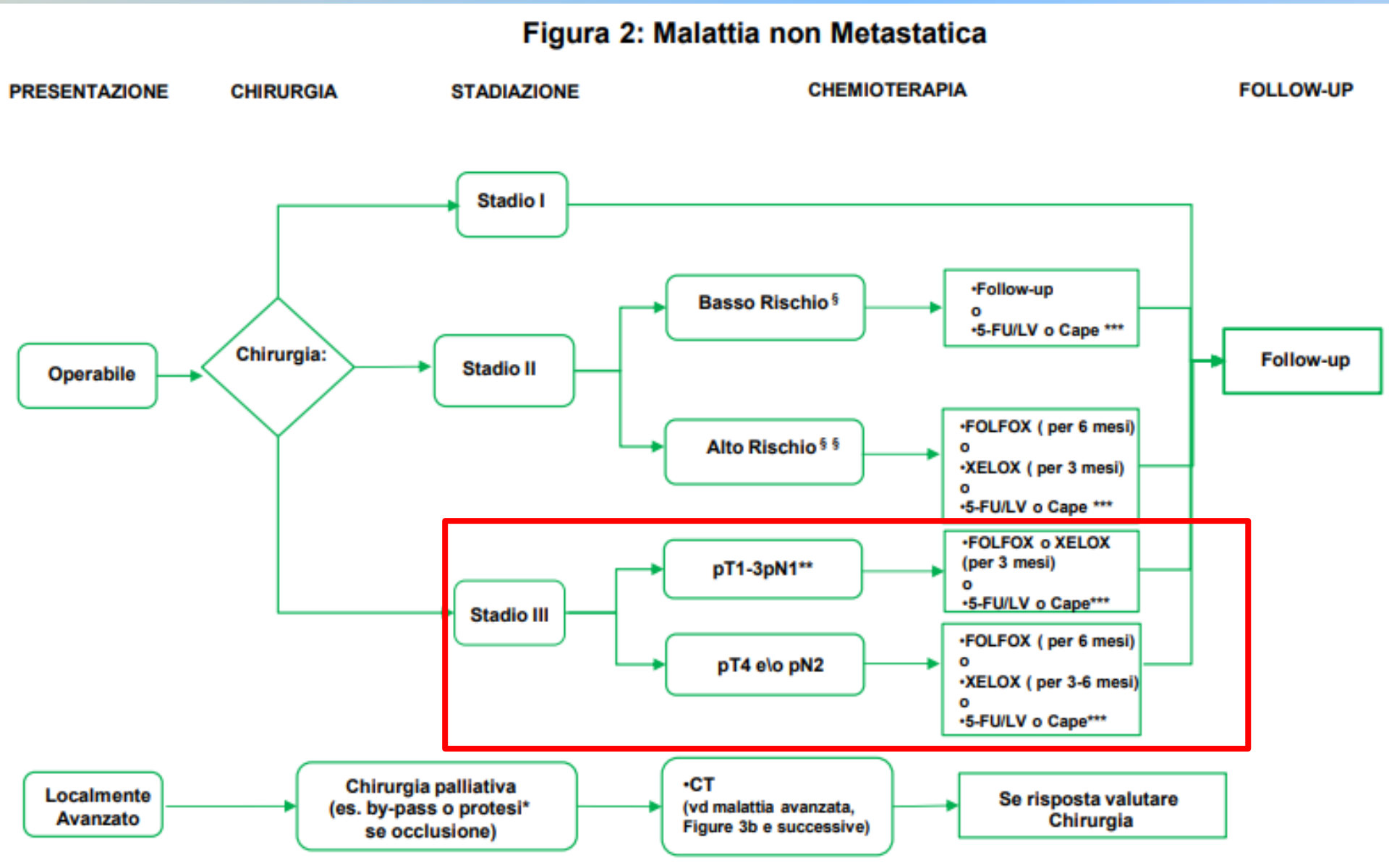
- XELOX, oxaliplatino ev 130 mg/m2 giorno 1 e capecitabina per os 2000 mg/m2 bid per 14 giorni, ogni 21 giorni, per 8 cicli, con la possibilità di somministrare 4 cicli (3 mesi di trattamento) di XELOX nei pazienti in III stadio definiti a basso di recidiva (pT1-3N1).

- FOLFOX6 modificato, oxaliplatino ev 85 mg/m2 giorno 1, Acido folico 200 mg/m2 giorno 1, 5fluorouracile (5FU) bolo ev 400 mg/m2 giorno 1 e 5FU 2400 mg/m2 in infusione continua (ic) per 46 ore, ogni 14 giorni, per 12 cicli, in particolare nei casi in cui vi siano condizioni cliniche che non consentano la somministrazione di una terapia orale.

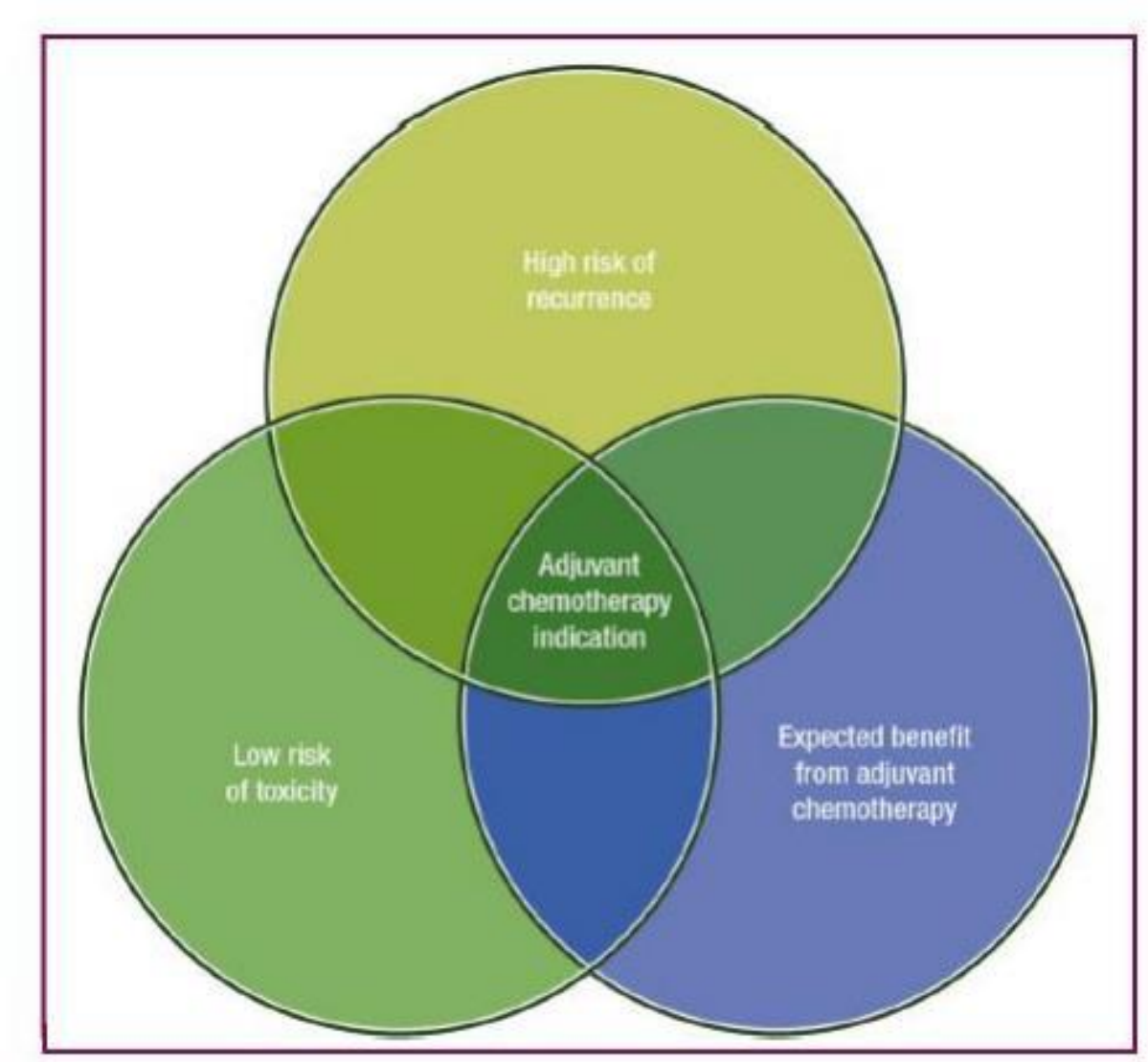
Adjuvant AIOM guideline: in STAGE II



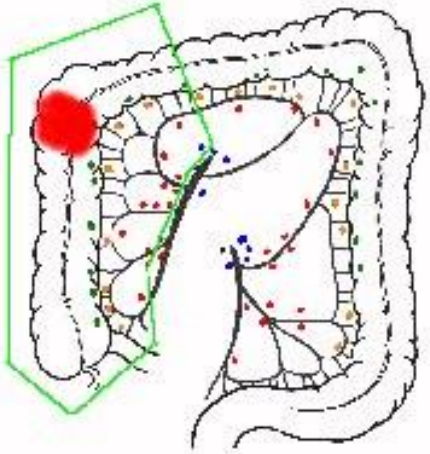
Adjuvant AIOM guideline: in STAGE III



Factors to guide adjuvant decision making



Treatment for colorectal cancer



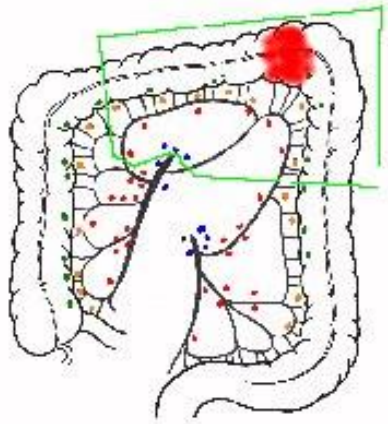
ONCOLOGIC RADICALITY

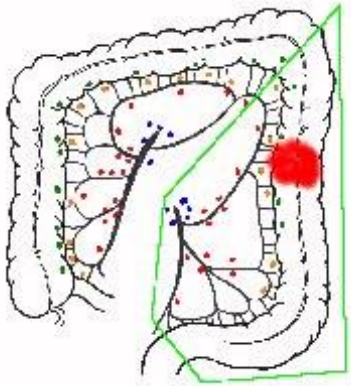
Rimozione *en bloc* di colon e linfonodi

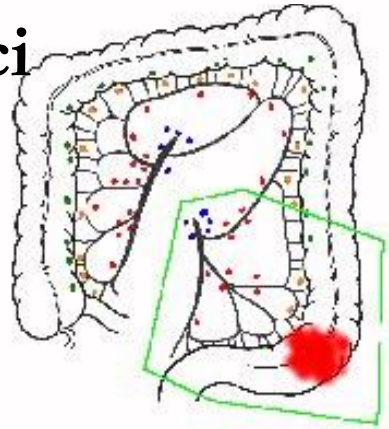
Tecnica *no touch*

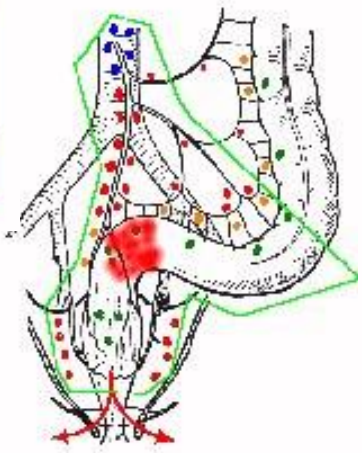
Legatura alta dei vasi mesenterici

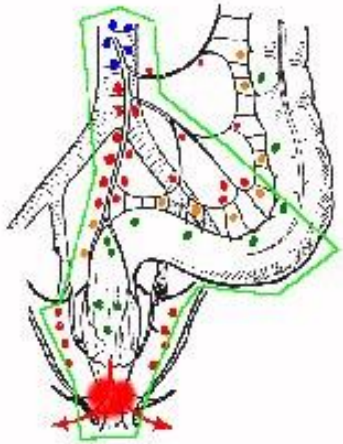
Escissione del mesoretto

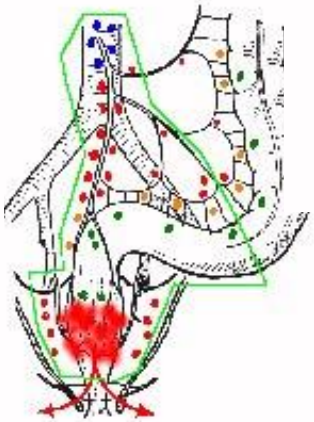












Strategies in the Management of Rectal Tumors

1874 **Kocher** posterior rectal resection with sacrectomy

1879 **Gussenbauer** Hartmann-procedure

1884 **Czerny** APR

1888 **Hochenegg** pull-through procedure

1896 **Quénu** APR

1908 **Miles** APR with *en bloc* lymphadenectoy

1910 **Balfour** anterior resection with anastomosis

1913 **Strauss** electro-coagulation

1923 **Hartmann** abdominal resection with anus *in situ*

1926 **Lockhart-Mummery** APR in 2 stages

1948 **Dixon** confirmation safety of spincter preserving resection

1950 **Deddish** APR with lateral lymph node dissection

1972 **Parks** low anterior resection

1975 circular stapler (Russia)

1980 **Moriya** nerve sparing rectal resection with lateral lymph node dissection

1982 **Heald** total mesorectal excision

1985 **Buess** transanale endoscopisc microsurgery; (neo-)adjuvant (chemo-)radiation

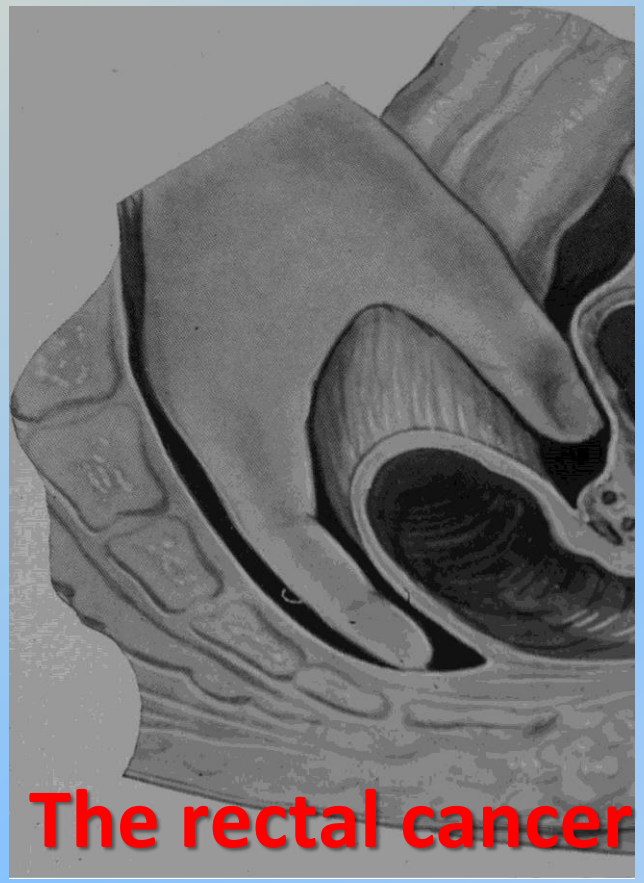
1991 **Jacobs** laparoscopic total mesorectal excision

1995 **Enker** nerve sparing total mesorectal excision

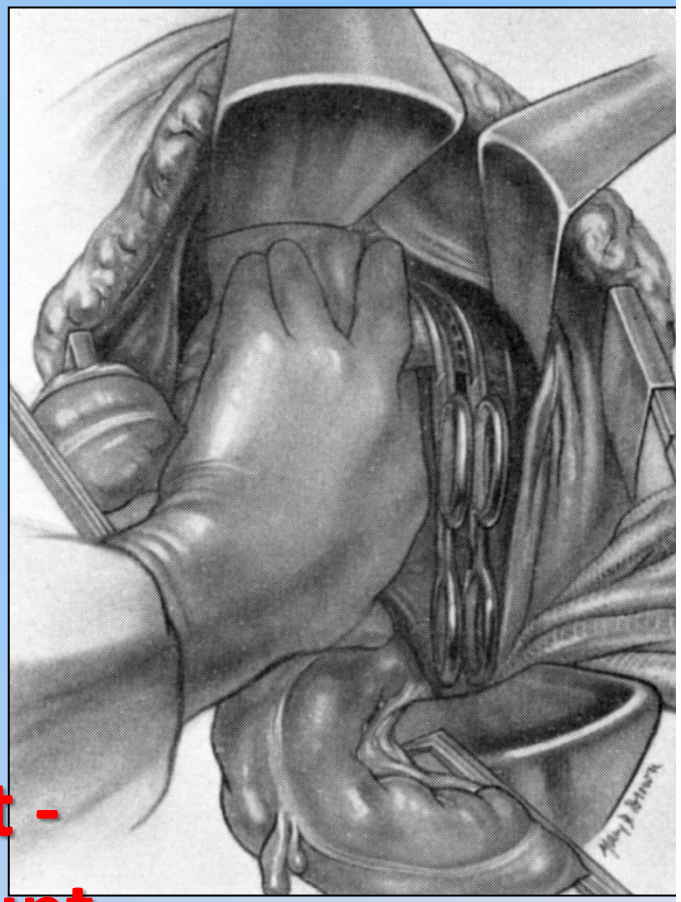
2011

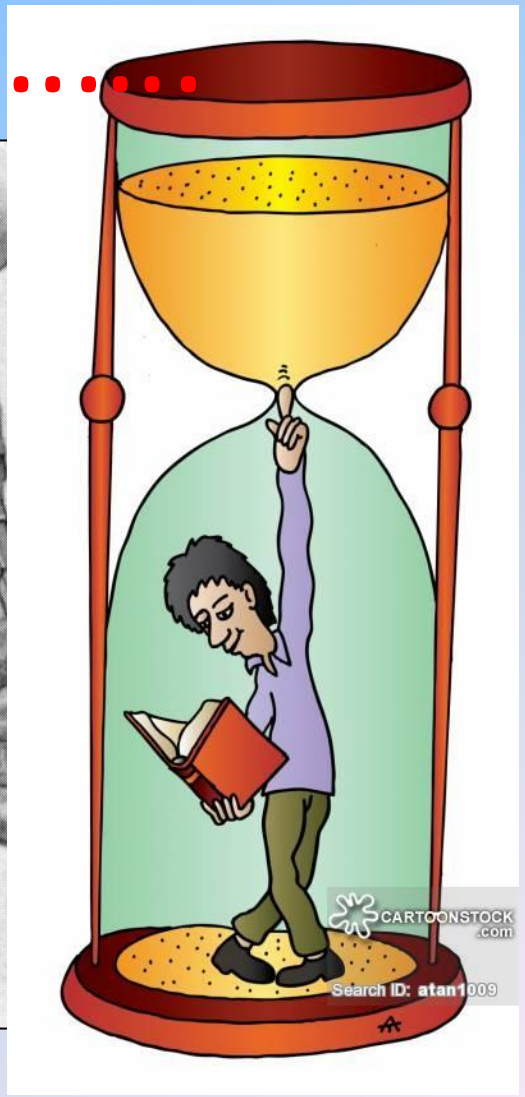
Strategies in the Management of Rectal Tumors

FROM……



The rectal cancer surgery of the past - rude, blind and blunt dissection!





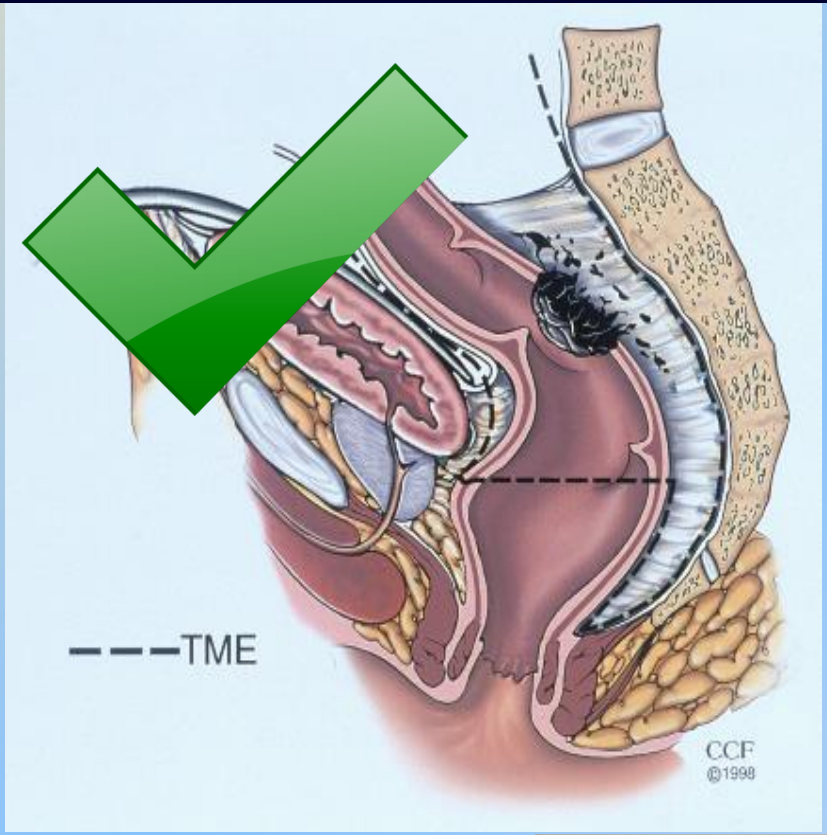
Strategies in the Management of Rectal Tumors

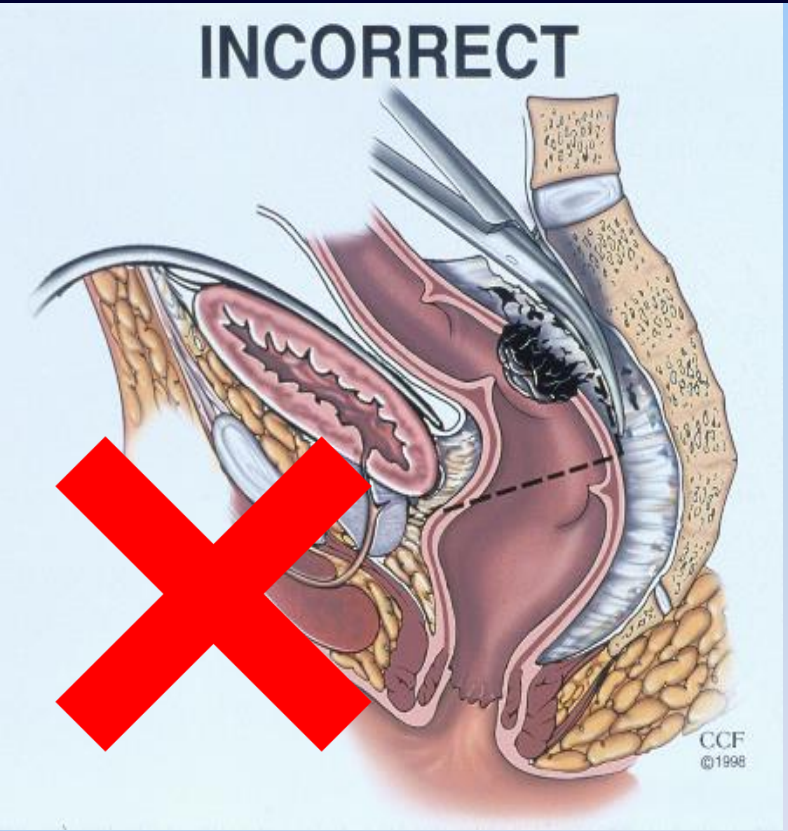
. . . . . TO

The modern approach :

Sharp dissection under full visualization ! TME

Total mesorectal excision





Journal of the Royal Society of Medicine Volume 81 September 1988

Practicalities of avoiding damage to the neurovascular confluence

It is thus logical in the routine case, before we tackle the danger area at 10 o'clock or 2 o'clock on our journey round the rectum to recommence the dissection in the midline anteriorly where the nerves will not be endangered. Since we are doing a cancer operation we should cut the peritoneum anterior to the peritoneal reflection and resect this with the rectum. If we cut straight on to the vesicles we find an essentially bloodless plane between them and the fascia of Denonvillier and we can proceed down anterior to this until it comes forward to become somewhat adherent to the prostate, when we must cut through it to liberate the lower third of the rectum anteriorly.

We now turn to our two 'STALKS', i.e. lateral ligaments, middle rectal vessels, etc. at 2 o'clock and 10 o'clock. In the outer substance of these lie the

Total mesorectal excision

CRM e Total Mesorectal Excision

L'incompleta escissione del mesoretto conduce a:

- ↑ Recidiva locale
- ↓ Sopravvivenza

Nagtegaal ID, J Clin Oncol, 2002

Before TME surgery, local recurrence rate was approximately 30%

technique may be demonstrated by comparison of two large published series of personal cases that differed in the dissection of the anterior mesorectum only by the plane of excision – in front of or behind Denonvilliers' fascia[7,8]. Although there were no major differences in outcome for most patients, those with Dukes' stage C disease had a local recurrence rate of 21 per cent in one series (dissection behind Denonvilliers' fascia)[7], compared with 6·5 per cent when the plane of dissection was in front[8]. Thus the authors believe the answer to the question of whether to dissect in front of or behind Denonvilliers' fascia must be in front, until dissection is beyond the tumour. Such attention to detail will optimize outcomes in this technically challenging but rewarding surgery.

prostatecto
1982; 128:
3 van Ophove
origins of th
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4 Sinnatamby
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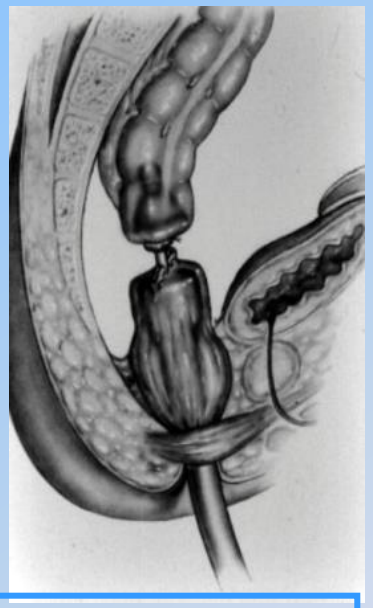
5 Lindsey I, M
dissection. B
6 Heald RJ. T
81: 503–508
7 Killingback M
curative resec
mesorectal ex
8 MacFarlane J
rectal cancer.

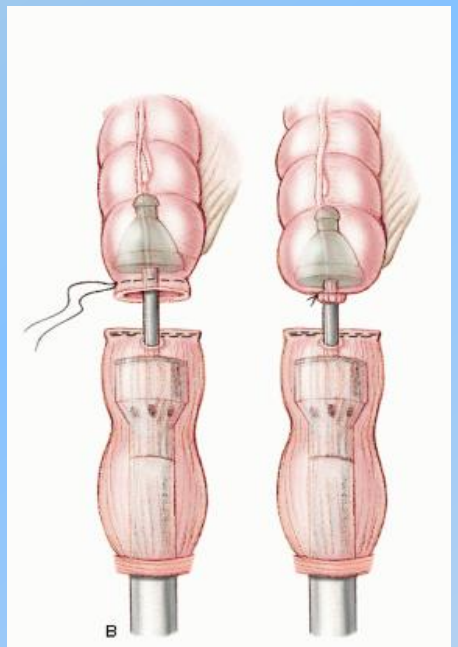
Opzioni terapeutiche FASE DEMOLITIVA Laparo/Open/Robotic

LOCAL EXCISION

RESEZIONE ANTERIORE per lesioni della giunzione sigma retto e del retto superiore



RESEZIONE ANTERIORE BASSA +TME o TaTME per lesioni del retto medio



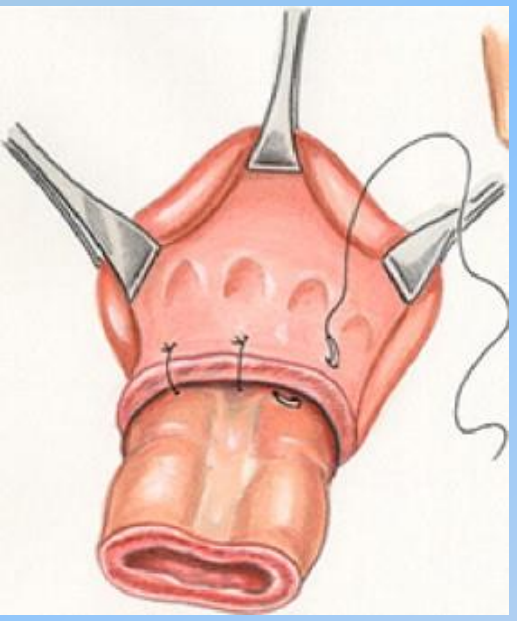
RESEZIONE ANTERIORE ULTRA BASSA +TME o TaTME

per lesioni del retto inferiore

AMPUTAZIONE ADDOMINO PERINEALE per lesioni che infiltrano l'elevatore dell'ano, gli sfinteri

Opzioni terapeutiche FASE RICOSTRUTTIVA Laparo/Open/Robotic

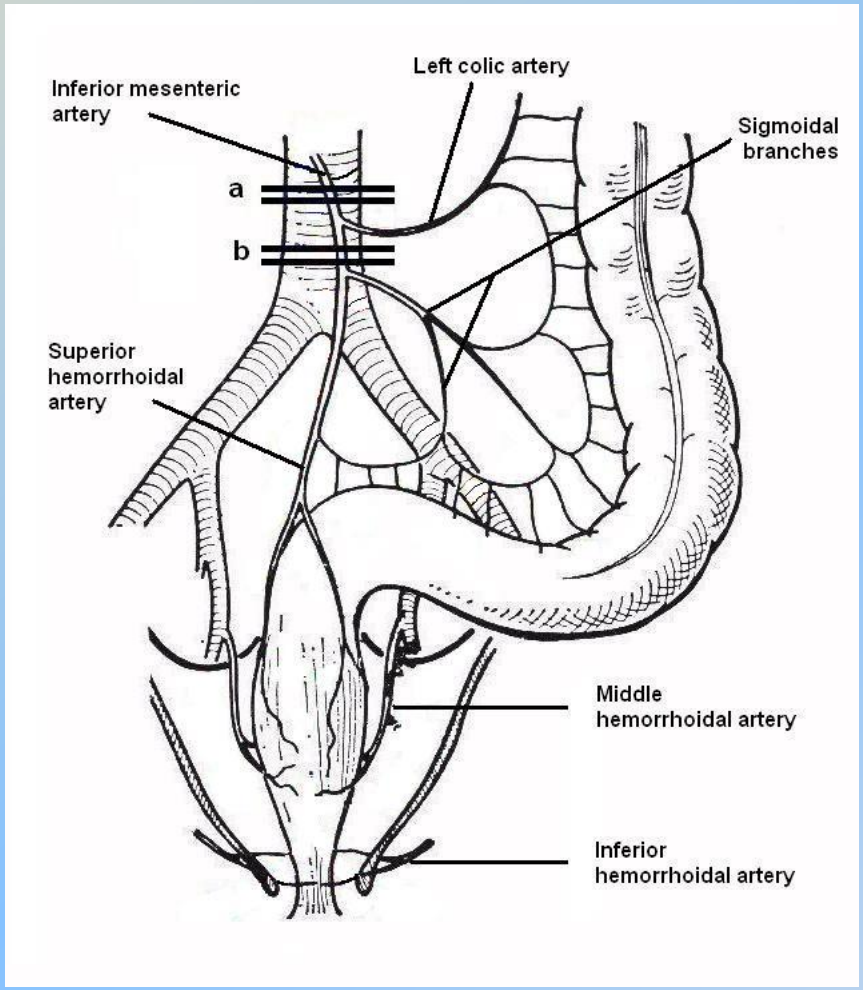
ANASTOMOSI COLORETTALI dopo resezione anteriore e resezione anteriore bassa

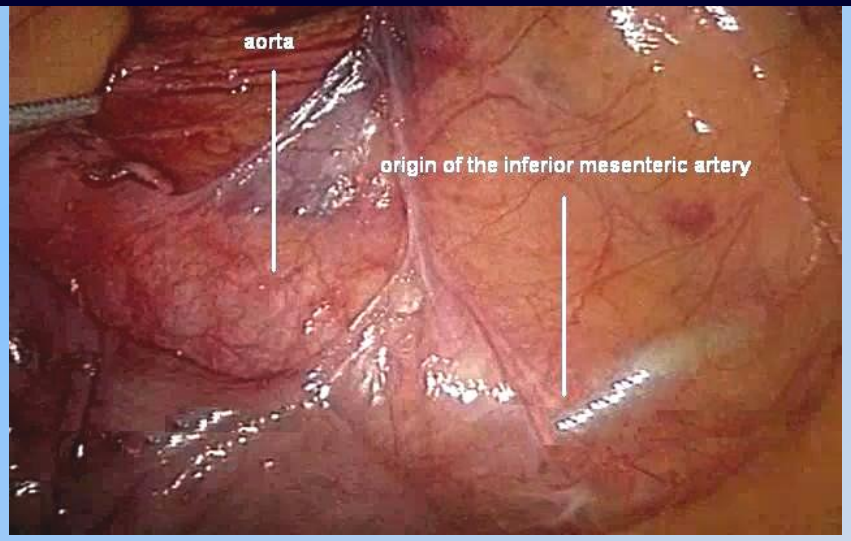


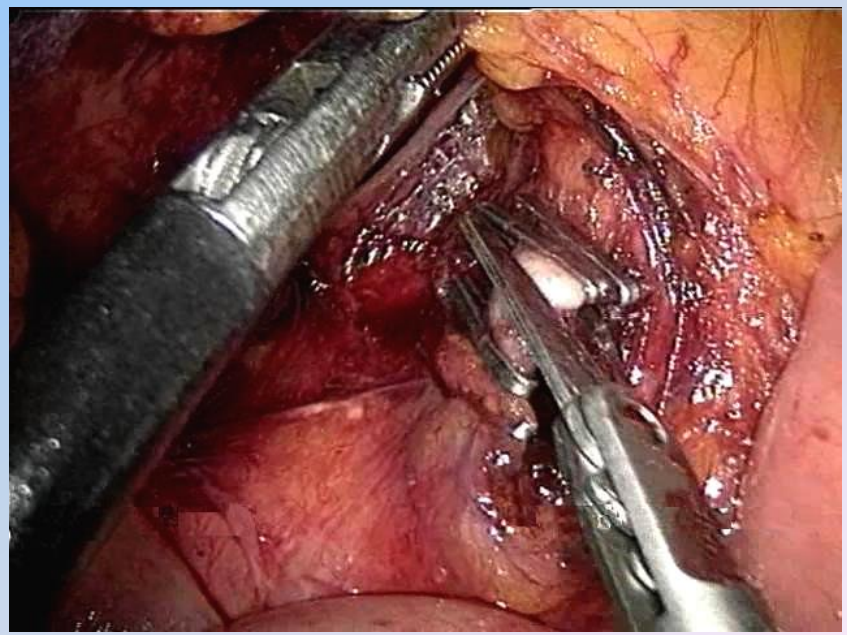
ANASTOMOSI COLOANALI dopo resezione ultrabassa . Possono essere Kight griffen, straight, J pouch, intersfinteriche

PULL THROUGH senza anastomosi

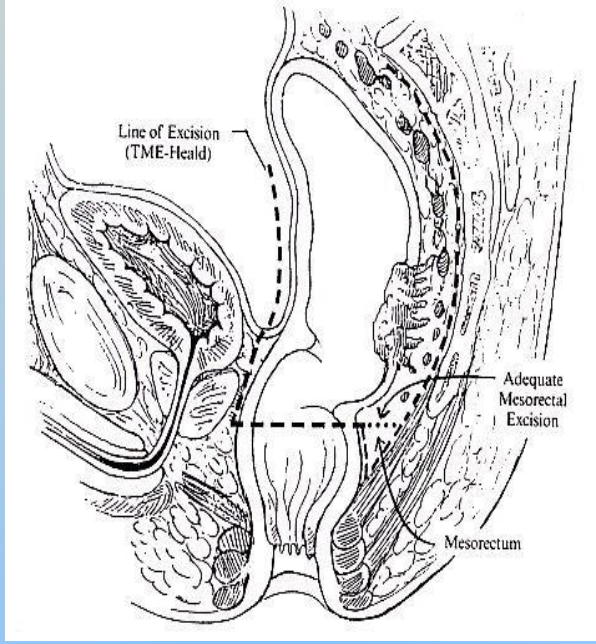
High Ligation of Inferior Mesenteric Artery

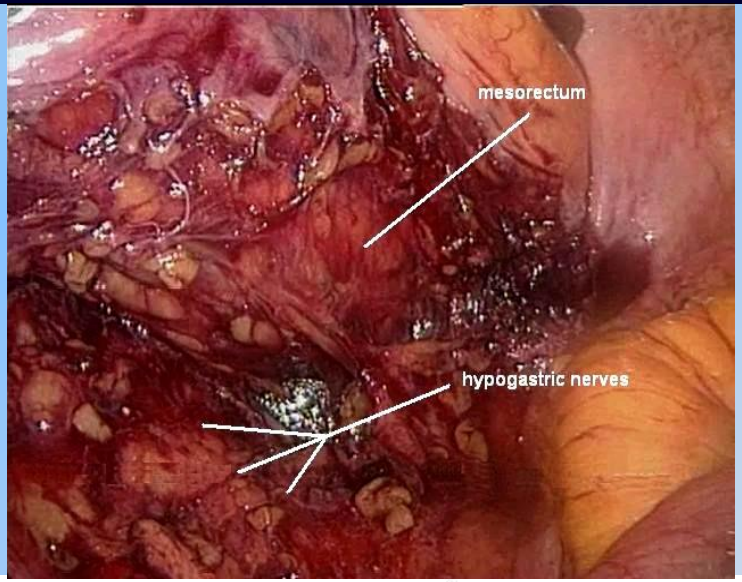


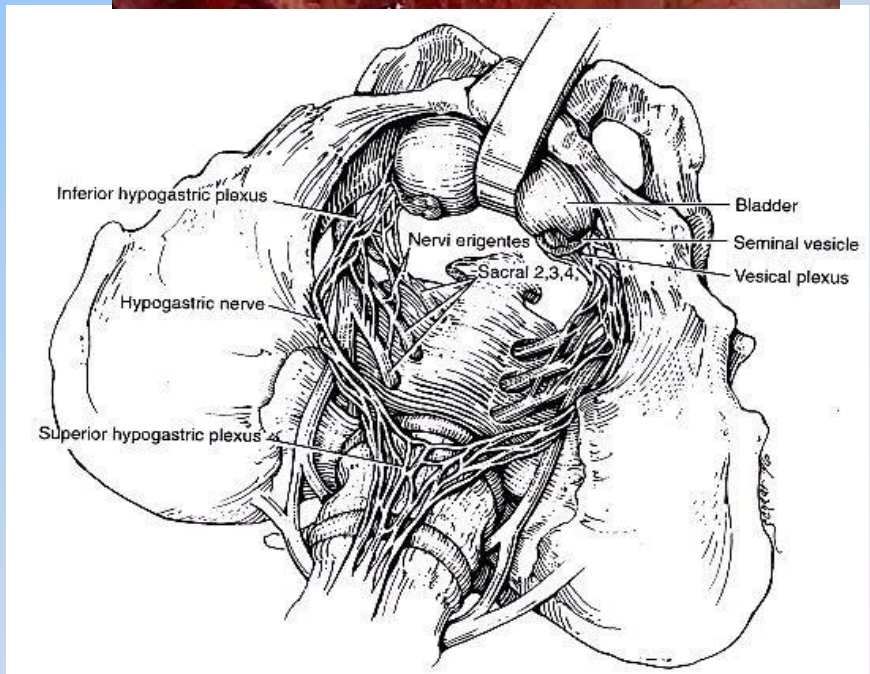




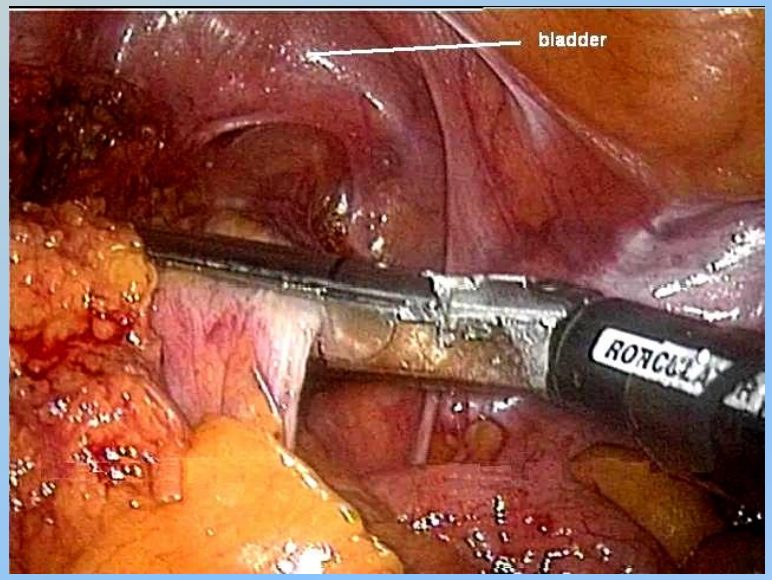
Total Mesorectal Excision: Nerve Preserving

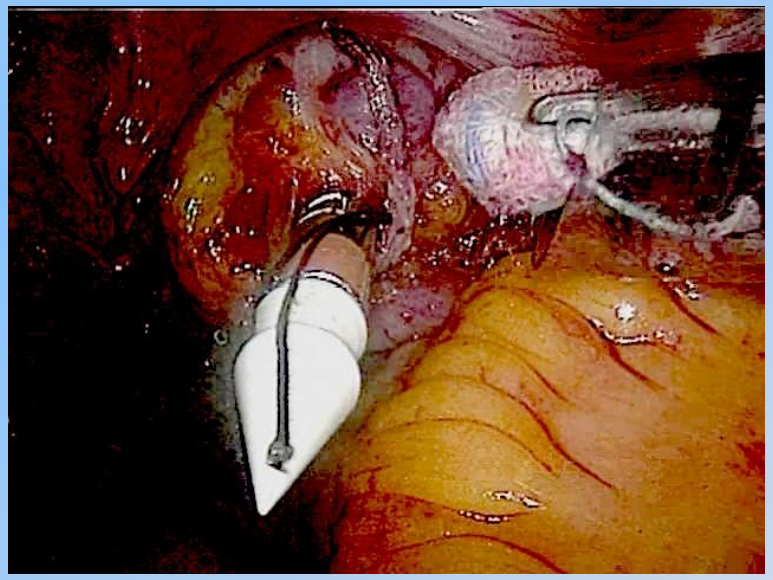


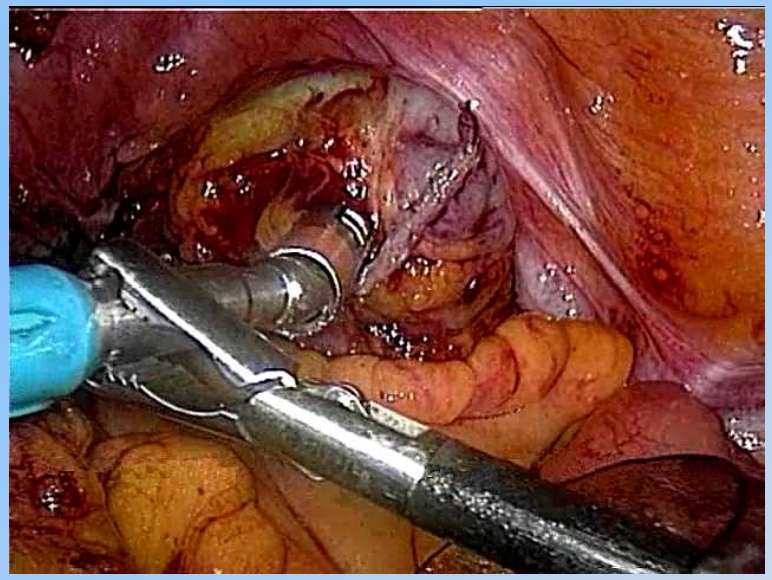


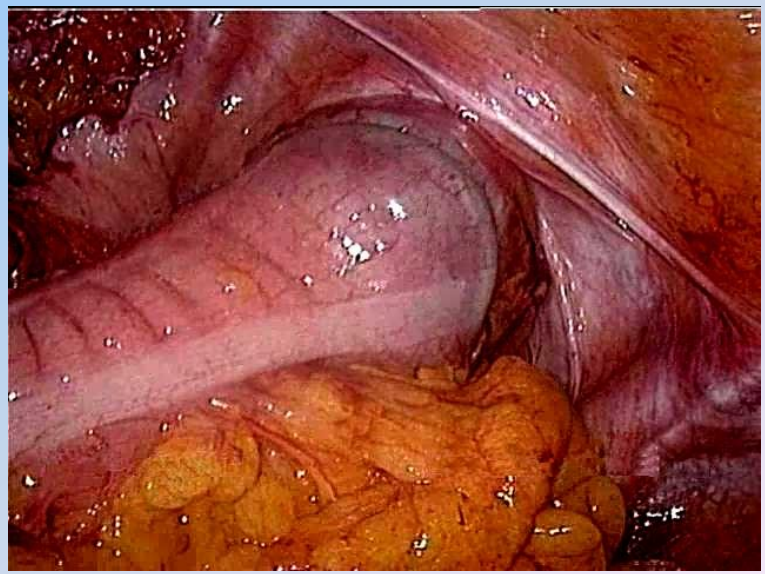


Adequate Distal Resection Margin



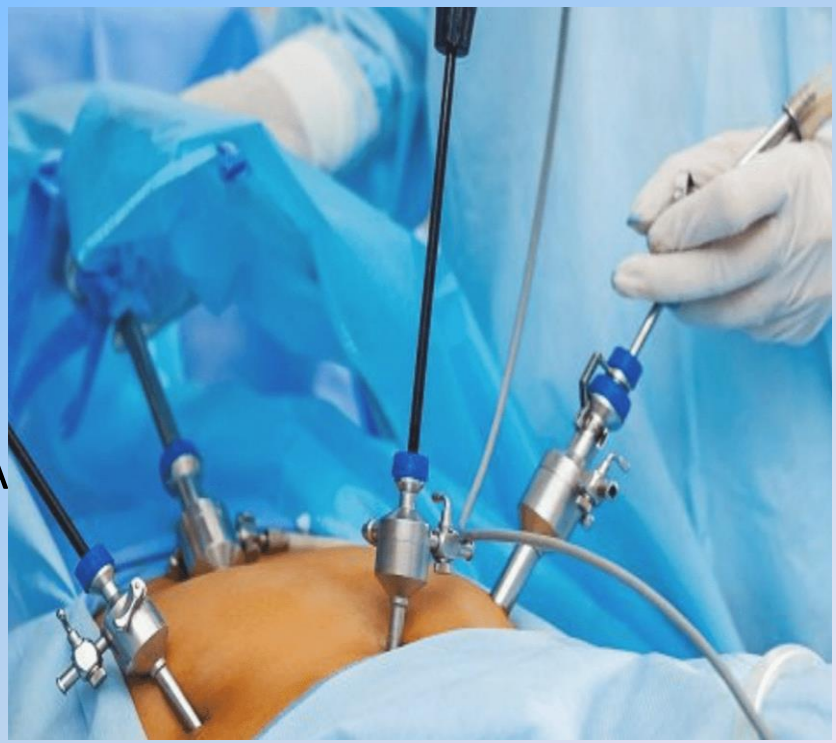






VANTAGGI DELLA CHIRURGIA MININVASIVA RISPETTO ALLA CHIRURGIA TRADIZIONALE

- RIDUCE LA FORMAZIONE DI ASCESSI INTRA-ADDOMINALI
- MINORE DEGENZA OSPEDALIERA
- MINORE FORMAZIONE DI ADERENZE POSTOPERATORIE
- PIÙ RAPIDA RIPRESA DELLA FUNZIONALITÀ INTESTINALE
- RIDUZIONE SPESA SANITARA
- MIGLIOR RISULTATO ESTETICO



Eshuis, BJS 2010
Bartels, Ann Surg 2012
Bartels, BJS 2013
Burns, BJS 2013
Bartels, Surg Endoscopy 2012

NO DIFFERENZE IN TERMINI DI MORTALITÁ E COMPLICANZE MAGGIORI

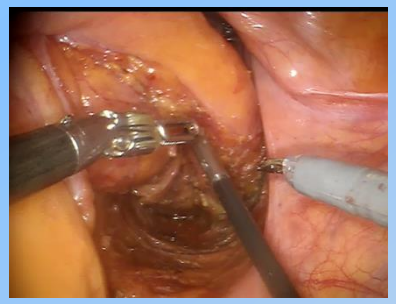
Robotic colorectal surgery

Vantaggi della Chirurgia Robotica

- Visione stereoscopica-3D e ingrandita del campo operatorio con sensazione di totale immersione per il chirurgo
- Recupero del normale asse occhio-mano senza effetto fulcro dei trocars
- Controllo del laparoscopio da parte del chirurgo
- 7 gradi di libertà e movimenti intuitivi simili a quelli della mano grazie alla tecnologia *EndoWrist® - Intuitive Surgical, Inc.*
- Assenza del tremore fisiologico della mano del chirurgo
- Curva di apprendimento più breve per le procedure più complesse

Quali steps chirurgici possono essere facilitati dalle caratteristiche tecniche del robot?

Dissezione dei vasi mesenterici inferiori Abbassamento della flessura splenica	*D'Annibale A et al. Dis Colon Rectum. 2004* *Spinoglio G et al. Dis Colon Rectum. 2008*
Identificazione dell'uretere e dei vasi gonadici	*DeNoto G et al.J Laparoendosc Adv Surg Tech A. 2006*
Preservazione dei nervi autonomici	*D'Annibale A et al. Dis Colon Rectum. 2004* *Spinoglio G et al. Dis Colon Rectum. 2008* *Baik SH et al. Surg Endosc. 2008*
Suture (eg. Problema tecnico suturatrice)	*D'Annibale A et al. Dis Colon Rectum. 2004*
Mobilizzazione del retto	*Hellan M et al. Ann Surg Oncol. 2007* *Baik SH et al. Surg Endosc. 2008*
Dissezione in pelvi stretta	*Baek SJ et al Surg Endosc 2014* *Pigazzi A et al. Surg Endosc. 2006* *Rockall TA et al. Surg Clin North Am. 2003*



Paziente Obeso

Papanikolaou IG. Surg Laparosc Endosc Percutan Tech 2014

Chirurgia Robotica colorettale

CONTRO

- ✓ Costi daVinci®
- ✓ Limitata evidenza scientifica
- ✓ Ottimi risultati della chirurgia lap
- ✓ Necessità di una nuova learning curve

IL PUNTO CHIAVE E' UN OTTIMIZZAZIONE DEL PERCORSO CHIRURGICO

- OTTIMIZZAZIONE PREOPERATORIA
- CHIRURGIA MINIINVASIVA
- RAPIDA RIPRESA PER IL PAZIENTE
- OTTIMIZZAZIONE DELLA GESTIONE INFERMIERISTICA
- OTTIMIZZAZIONE ANESTESIOLOGICA
- DIMISSIONE PRECOCE

- RAPIDA RIPRESA PER IL PAZIENTE
- DIMISSIONE PRECOCE

Laparoscopic surgery versus open surgery for colon cancer: short-term outcomes of a randomised trial

*The COlon cancer Laparoscopic or Open Resection Study Group**

	Laparoscopic colectomy (n=536)	Open colectomy (n=546)	p
Tumour size (cm)*			
Median (range)	4·0 (0·4–17)	4·5 (0·8–17)	0·09
Resection margins†			
Positive	10 of 526 (2%)	10 of 538 (2%)	1·0
Aboral	1	1	
Oral	0	1	
Circumferential	9	8	
Negative	516 of 526 (98%)	528 of 538 (98%)	
Clinical T stage‡			
T1	41 of 528 (8%)	39 of 537 (7%)	0·95
T2	107 of 528 (20%)	105 of 537 (20%)	
T3	350 of 528 (66%)	359 of 537 (67%)	
T4	30 of 528 (6%)	34 of 537 (6%)	
Clinical N stage§¶			
N0	347 of 528 (66%)	364 of 539 (68%)	0·44
N1	125 of 528 (24%)	122 of 539 (23%)	
N2	45 of 528 (9%)	48 of 539 (9%)	
N3	11 of 528 (2%)	5 of 539 (1%)	
Tumour stage§¶			
I	129 of 528 (24%)	125 of 539 (23%)	0·60
II	218 of 528 (41%)	239 of 539 (44%)	
III	181 of 528 (34%)	175 of 539 (32%)	
Histology§¶			
Well differentiated	90 of 529 (17%)	86 of 538 (16%)	0·89
Well to moderately differentiated	28 of 529 (5%)	32 of 538 (6%)	
Moderately differentiated	321 of 529 (61%)	315 of 538 (59%)	
Moderately to poorly differentiated	13 of 529 (2%)	15 of 538 (3%)	
Poorly differentiated or undifferentiated	46 of 529 (9%)	55 of 538 (10%)	
Not specified	31 of 529 (6%)	35 of 538 (7%)	
Number of positive lymph nodes in resected sample‖			
Median (range)	10 (0–41)	10 (0–42)	0·35

*Data missing for 11 patients. †Data missing for 18 patients. ‡Data missing for 17 patients. §Data missing for 15 patients. ¶Might not add to 100% because of rounding. ‖Data missing for 36 patients.

Table 3: Details of pathology report

	Laparoscopic colectomy (n=536)	Open colectomy (n=546)	Mean difference between groups (95% CI)	p
Fluid intake >1 L (days)*				
Mean (SD)	2·9 (1·9)	3·8 (3·4)	0·9 (0·6 to 1·2)	<0·0001
First bowel movement (days)†				
Mean (SD)	3·6 (1·7)	4·6 (3·0)	1·0 (0·7 to 1·3)	<0·0001
Hospital stay (days)‡				
Mean (SD)	8·2 (6·6)	9·3 (7·3)	1·1 (0·2 to 1·9)	<0·0001
Analgesic use				
Day 1				
Opiates	292 of 516 (57%)	313 of 526 (60%)	3 (−3 to 9)	0·37
Non-opiates	366 of 517 (71%)	335 of 526 (64%)	−7 (−13 to −1)	0·02
Epidural	111 of 517 (22%)	190 of 526 (36%)	14 (9 to 20)	<0·0001
Day 2				
Opiates	208 of 514 (41%)	256 of 524 (49%)	8 (2 to 14)	0·008
Non-opiates	421 of 514 (82%)	443 of 524 (85%)	3 (−2 to 7)	0·29
Epidural	95 of 514 (18%)	164 of 523 (31%)	13 (8 to 18)	<0·0001
Day 3				
Opiates	132 of 513 (26%)	191 of 524 (37%)	11 (5 to 16)	0·0003
Non-opiates	343 of 513 (67%)	368 of 526 (70%)	3 (−2 to 9)	0·27
Epidural	42 of 513 (8%)	83 of 524 (16%)	8 (4 to 12)	0·0002
Complications§				
Overall	111 of 535 (21%)	110 of 545 (20%)	−1 (−5 to 4)	0·88
Wound infection	20 of 535 (4%)	16 of 545 (3%)	−1 (−3 to 1)	0·57
Wound dehiscence	2 of 534 (<1%)	7 of 544 (1%)	0·6 (−0·2 to 2)	0·18
Pulmonary	8 of 535 (2%)	13 of 545 (2%)	0·9 (−1 to 3)	0·40
Cardiac	4 of 535 (1%)	9 of 545 (2%)	1 (−0·5 to 2)	0·28
Bleeding	13 of 534 (2%)	8 of 544 (2%)	−0·9 (−3 to 1)	0·36
Urinary-tract infection	12 of 535 (2%)	13 of 545 (2%)	0·2 (−2 to 2)	1·00
Anastomotic failure	15 of 535 (3%)	10 of 545 (2%)	−1 (−3 to 1)	0·39
Bowel obstruction >3 days	10 of 534 (2%)	15 of 544 (3%)	0·9 (−1 to 3)	0·45
Other	45 of 534 (8%)	40 of 544 (7%)	−1 (−4 to 2)	0·59
Reintervention	37 of 535 (7%)	25 of 545 (5%)	−2 (−5 to 0·4)	0·13
Death	6 of 535 (1%)	10 of 545 (2%)	0·7 (−0·7 to 2·2)	0·45

*Data missing for 64 patients. †Data missing for 54 patients. ‡Data missing for 11 patients. §Some patients had more than one complication.

Table 4: Postoperative recovery, morbidity, and mortality

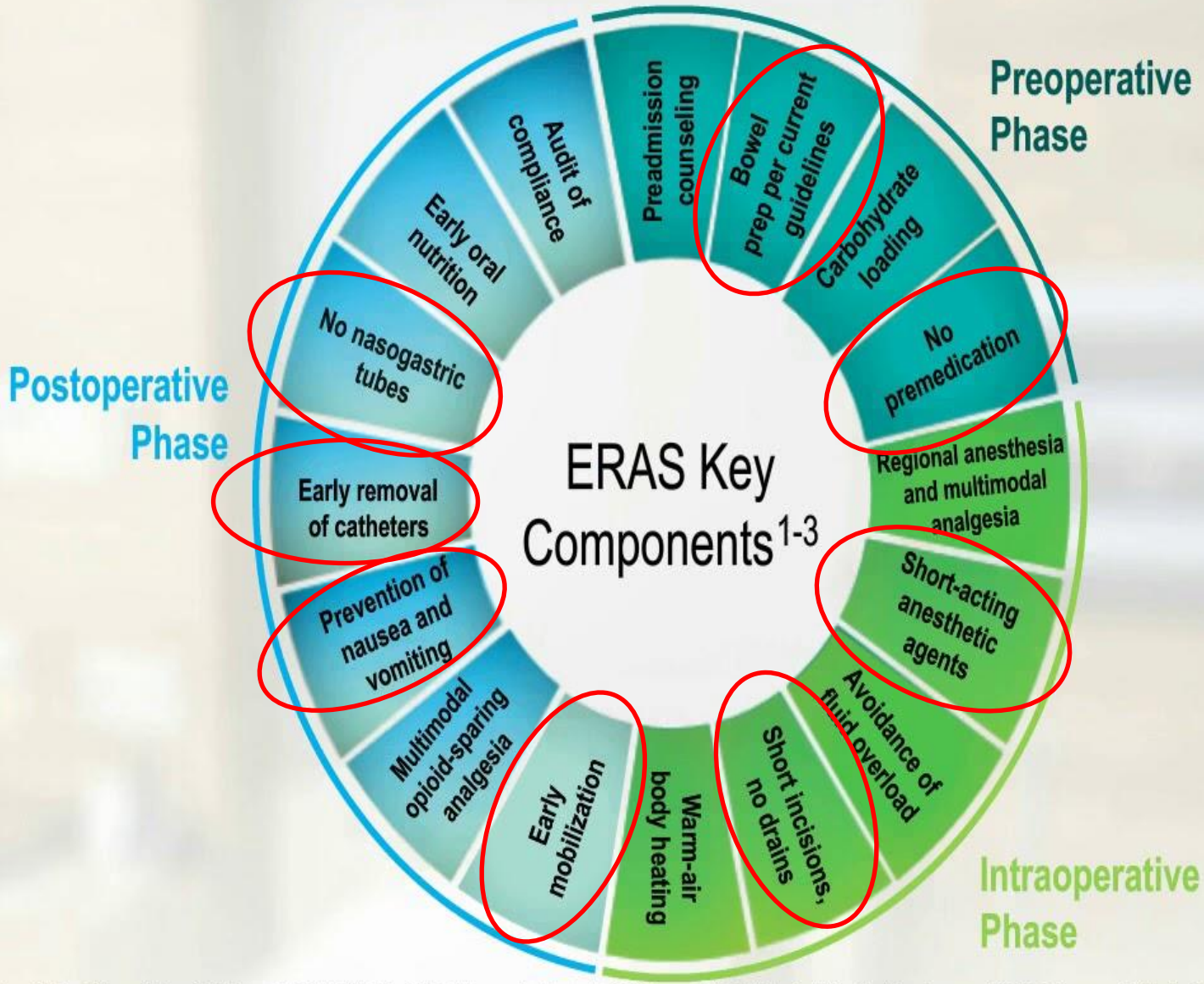
Su circa 1000 pazienti laparoscopic vs open risultati sovrapponibili per radicaltà oncologica (margini, stadiazione TNM, linfonodi +)

Outcome postop: vantaggi laparoscopia (ospedalizzazione 8,2 gg vs 9,3 gg,

precoce ripresa canalizzazione 3,6 gg vs 4,6 gg

Ridotto utilizzo degli analgesici

Complicanze : profilo sovrapponibile



1. Modified from Melnyk M, et al. *Can Urol Assoc J.* 2011;5(5):342-348. 2. Ljungqvist O, et al. *JAMA Surg.* 2017;E1-E7. Published online January 11, 2017. Accessed July 8, 2018. 3. AANA. https://www.aana.com/practice/clinical-practice-resources/enhanced-recovery-after-surgery. Accessed July 8, 2018.

World J Surg
https://doi.org/10.1007/s00268-018-4844-y

SCIENTIFIC REVIEW

Guidelines for Perioperative Care in Elective Colorectal Surgery: Enhanced Recovery After Surgery (ERAS®) Society Recommendations: 2018

U. O. Gustafsson[1] · M. J. Scott[2,3] · M. Hubner[4] · J. Nygren[5] · N. Demartines[4] · N. Francis[6,7] · T. A. Rockall[8] · T. M. Young-Fadok[9] · A. G. Hill[10] · M. Soop[11] · H. D. de Boer[12] · R. D. Urman[13] · G. J. Chang[14] · A. Fichera[15] · H. Kessler[16] · F. Grass[4] · E. E. Whang[17] · W. J. Fawcett[18] · F. Carli[19] · D. N. Lobo[20] · K. E. Rollins[20] · A. Balfour[21] · G. Baldini[19] · B. Riedel[22] · O. Ljungqvist[23]

Summary and recommendation:

Pelvic and peritoneal drains show no effect on clinical outcome and should not be used routinely.

Evidence level: High

Recommendation grade: Strong

RANDOMIZED CONTROLLED TRIAL

To Drain or Not to Drain Infraperitoneal Anastomosis After Rectal Excision for Cancer

The GRECCAR 5 Randomized Trial

Quentin Denost, MD, PhD,† Philippe Rouanet, MD, PhD,‡ Jean-Luc Faucheron, MD, PhD,§¶ Yves Panis, MD, PhD,|| Bernard Meunier, MD,** Eddy Cotte, MD, PhD,†† Guillaume Meurette, MD, PhD,‡‡ Sylvain Kirzin, MD, PhD,§§ Charles Sabbagh, MD, PhD,¶¶|||| Jèrôme Loriau, MD, PhD,*** Stèphane Benoist, MD, PhD,††† Christophe Mariette, MD, PhD,‡‡‡ Igor Sielezneff, MD, PhD,§§§ Bernard Lelong, MD,¶¶¶ François Mauvais, MD,|||||| Benoit Romain, MD,**** Marie-Line Barussaud, MD,†††† Christine Germain, MD,‡‡‡‡ Marie-Quitterie Picat, MD,‡‡‡‡§§§§¶¶¶¶ Eric Rullier, MD,*† and Christophe Laurent, MD, PhD*†, for the French Research Group of Rectal Cancer Surgery (GRECCAR)*

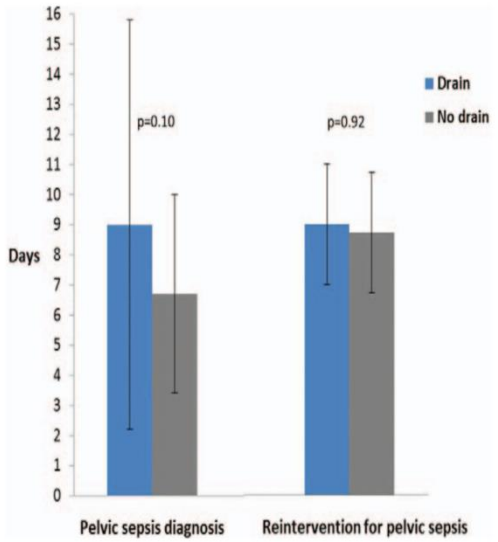


FIGURE 2. Time to diagnosis and reoperation for pelvic sepsis.

TABLE 3. Details of Pelvic Sepsis

	Drain (n = 236)		No Drain (n = 233)		
	N	%	n	%	*P*
During initial hospital admission*					
Anastomotic leakage	22	9.3	20	8.6	0.78
Pelvic abscess	17	7.2	27	11.6	0.10
Peritonitis	8	3.4	9	3.9	0.78
30 Days after surgery*					
Anastomotic leakage	35	14.8	35	15.1	0.94
Pelvic abscess	27	11.5	35	15.2	0.24
Peritonitis	8	3.4	10	4.3	0.60

*Patient could have more than 1 event.

The role of nasogastric tube in decompression after elective colon and rectum surgery : a meta-analysis

Wensheng Rao · Xue Zhang · Jian Zhang · Ronglin Yan · Zhiqian Hu · Qiang Wang

Int J Colorectal Dis (2011) 26:423–429
DOI 10.1007/s00384-010-1093-4

Summary and recommendation:
Postoperative nasogastric tubes should not be used routinely; if inserted during surgery, they should be removed before reversal of anaesthesia.
Quality of evidence: High
Recommendation grade: Strong

Early enteral nutrition within 24h of colorectal surgery versus later commencement of feeding for postoperative complications (Review)

Andersen HK, Lewis SJ, Thomas S

Summary and recommendation:

Most patients can and should be offered food and ONS from the day of surgery. Perioperative immunonutrition in malnourished patients is beneficial in colorectal cancer surgery.

Quality of evidence:

Postoperative resumption of oral intake: Moderate

Immunonutrition: Low

Recommendation grade:

Postoperative resumption of oral intake: Strong

Immunonutrition: Strong (no harm)

Analysis 1.6. Comparison 1 Early enteral nutrition versus later commencement after gastrointestinal surgery, Outcome 6 lenght of hospital stay.

Review: Early enteral nutrition within 24h of colorectal surgery versus later commencement of feeding for postoperative complications

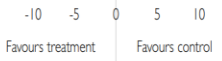
Comparison: 1 Early enteral nutrition versus later commencement after gastrointestinal surgery

Outcome: 6 lenght of hospital stay

Study or subgroup	Treatment N	Mean(SD)	Control N	Mean(SD)	Mean Difference IV,Random,95% CI	Mean Difference IV,Random,95% CI
Beier-Holgersen 1996	30	11.5 (6.66)	30	12.89 (6.61)		-1.39 [-4.75, 1.97]
Binderow 1994	32	6.7 (2)	32	8 (4.25)		-1.30 [-2.93, 0.33]
Carr 1996	14	9.8 (6.6)	14	9.3 (2.8)		0.50 [-3.26, 4.26]
Hartsell 1997	29	7.2 (3.3)	29	8.1 (2.3)		-0.90 [-2.36, 0.56]
Heslin 1997	97	11 (9)	98	10 (17.25)		1.00 [-2.86, 4.86]
Lucha 2005	26	6.3 (0)	25	6.6 (0)		0.0 [0.0, 0.0]
Mulrooney 2004	36	11.9 (4.54)	37	10.48 (4.83)		1.42 [-0.73, 3.57]
Ortiz 1996	95	13.13 (4.23)	95	16.57 (9.23)		-3.44 [-5.48, -1.40]
Reissman 1995	80	6.2 (0.2)	81	6.8 (0.2)		-0.60 [-0.66, -0.54]
Sagar 1979	15	14 (4)	15	19 (9)		-5.00 [-9.98, -0.02]
Schroeder 1991	16	10 (4)	16	15 (10)		-5.00 [-10.28, 0.28]
Smedley 2004	35	13.4 (7.5)	44	14.1 (6.6)		-0.70 [-3.86, 2.46]
Stewart 1998	40	9.36 (4.11)	40	10.08 (2.55)		-0.72 [-2.22, 0.78]
Watters 1997	15	17 (9)	16	16 (7)		1.00 [-4.70, 6.70]
Total (95% CI)	**560**		**572**			**-0.89 [-1.58, -0.20]**

Heterogeneity: $Tau^2 = 0.41$; $Chi^2 = 18.88$, df = 12 (P = 0.09); $I^2 = 36\%$

Test for overall effect: Z = 2.54 (P = 0.011)



PROSPETTIVE FUTURE

ORIGINAL CONTRIBUTION

Is Same-Day and Next-Day Discharge After Laparoscopic Colectomy Reasonable in Select Patients?

Nicholas P. McKenna, M.D.[1,2] • Katherine A. Bews, B.A.[2] • Omair A. Shariq, M.D.[1]
Elizabeth B. Habermann, Ph.D., M.P.H.[1,2] • Kevin T. Behm, M.D.[3] • Scott R. Kelley, M.D.[3]
David W. Larson, M.D., M.B.A.[3]

1 Department of Surgery, Mayo Clinic, Rochester, Minnesota
2 Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery, Mayo Clinic, Rochester, Minnesota
3 Division of Colon and Rectal Surgery, Mayo Clinic, Rochester, Minnesota

CONCLUSIONS: Discharge on the same day or next day after surgery was not associated with increased risk compared with discharge on postoperative day 3 to 5, and it did not result in a high rate of early readmissions. Increased use of expedited discharge pathways would reduce hospital costs and resource use. See **Video**

Review › Colorectal Dis. 2023 Jun;25(6):1102-1115. doi: 10.1111/codi.16511. Epub 2023 Feb 28.

Ambulatory laparoscopic colectomies: a systematic review

Leandro Siragusa [1], Gianluca Pellino [2 3], Bruno Sensi [1], Yves Panis [4], Vittoria Bellato [1], Jim Khan [5], Giuseppe S Sica [1]

› Ann Surg. 2022 Sep 1;276(3):562-569. doi: 10.1097/SLA.0000000000005561. Epub 2022 Jun 27.

Feasibility and Safety of Ambulatory Surgery as the Next Management Paradigm in Colorectal Resection Surgery

Ravi P Kiran [1], Koby Herman, Dilara Khoshknabi, Athanasios Angistriotis, James M Church

La chirurgia colo-rettale in regime ambulatoriale è fattibile fino a un terzo dei pazienti sottoposti a resezione/anastomosi del colon-retto e può essere eseguita con una sicurezza paragonabile alla pratica consolidata del ricovero ospedaliero di routine .

INDICATIONS FOR SURGERY AND SURGICAL TECHNIQUES

Oncologist / Radiotherapist

Surgeons:

colorectal, plastic, one spinal, urologists, gynaecologists

Radiologist: diagnostic, interventional

Anaesthetist: pain specialist, intensivist

Nurses: stoma, nutrition, tissue viability

Physiotherapist

Pathologist

Interdisciplinary cooperation


Grazie per l’attenzione