Colorectal cancer: Surgery, treatment, followup

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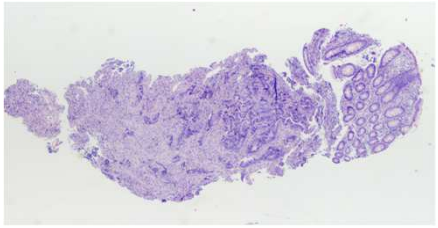
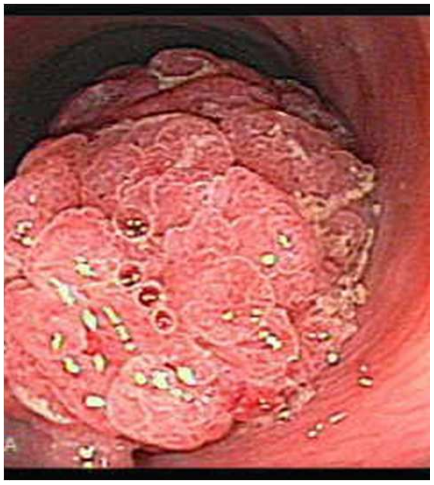
Case

- 59 year old woman, first colonoscopy
  - Otherwise healthy
  - No family history





Tumor location at presentation (non-HNPCC)

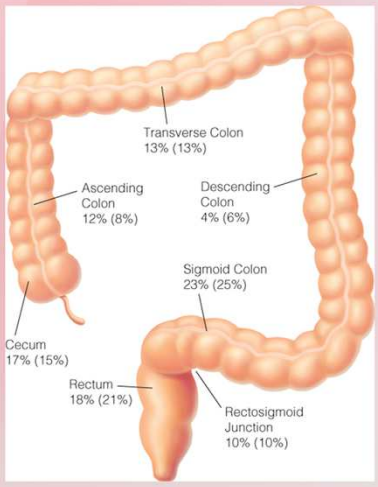
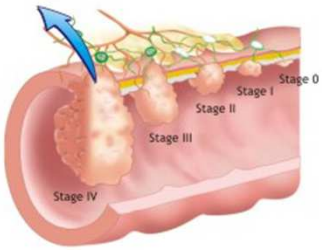


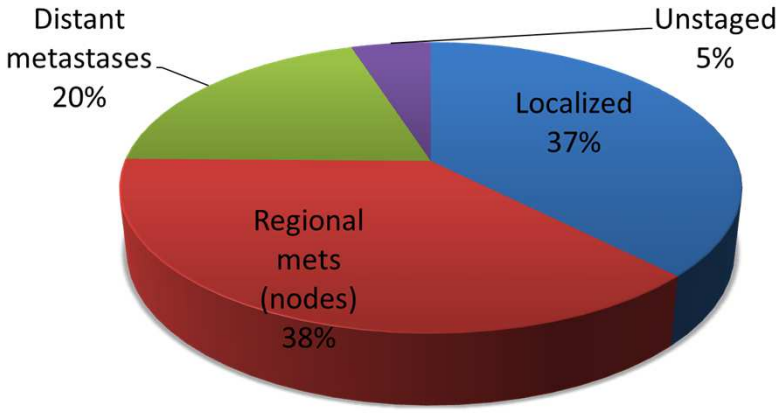
Figure 1 Frequencies of CRC . Shown are the relative frequencies of colorectal cancer for various anatomic subsites of the colon in 1996. For comparative purposes, fi gures for 1976 are provided in parentheses

TNM staging



AJCC/TNM Staging		Tumor
Stage 0	Tis (carcinoma in-situ)	Superficially involves the mucosa. Has not grown beyond the mucosa
Stage I	T1N0 T2N0	Invades through mucosa Invades through submucosa
Stage II	T3N0 T4N0	Invades through muscle layers Invades nearby tissues or organs
Stage III	Any T, N1-N3	Lymph nodes involved
Stage IV	Any T, Any N, M1	Distant Spread

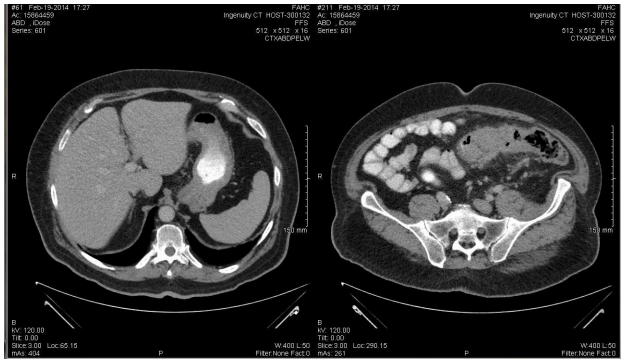
Stage distribution at presentation



SEER Database seer.cancer.gov

Preop staging workup - colon

- CEA
- CXR
- CT scan of the abdomen pelvis



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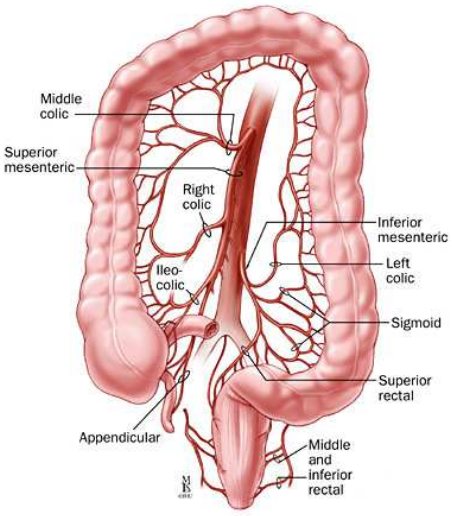
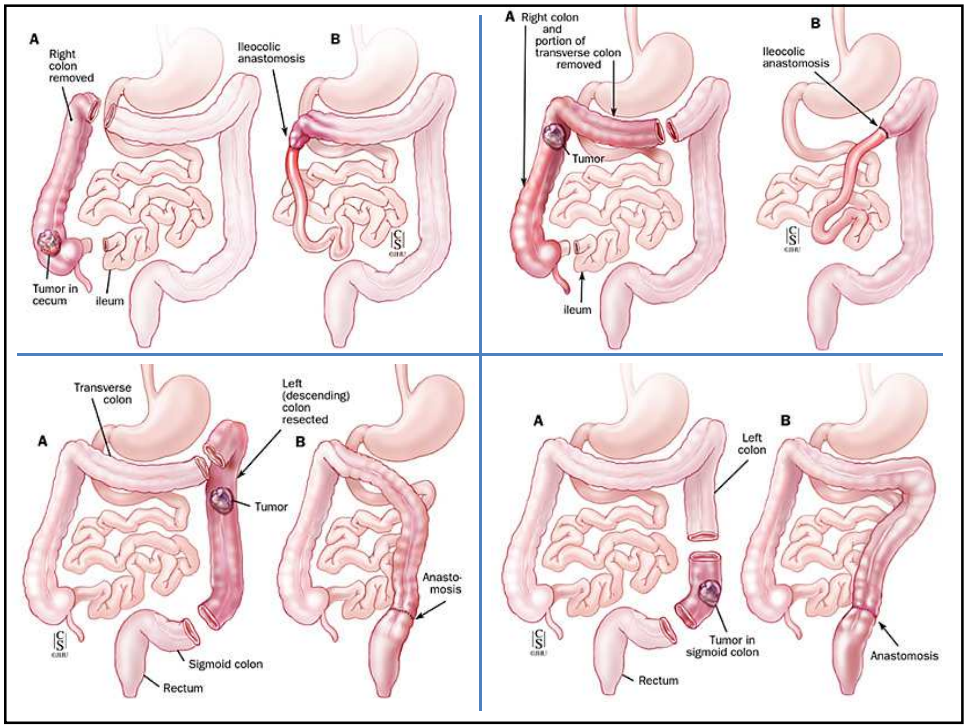
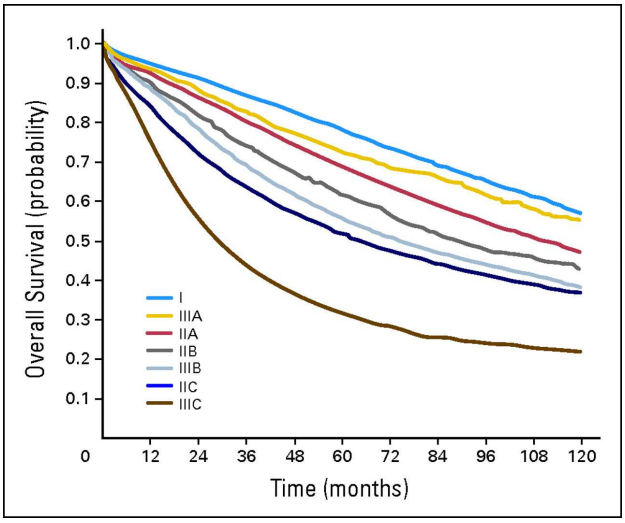
Operative Options





Kaplan-Meier overall survival on the basis of the seventh edition of the American Joint Committee on Cancer Staging Manual.



Stage	5yr survival
1	> 90%
2	65-90%
3	45-75%
4	10%

Weiser M R et al. JCO 2011;29:4796-4802

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Chemotherapy

(Adjuvant therapy)

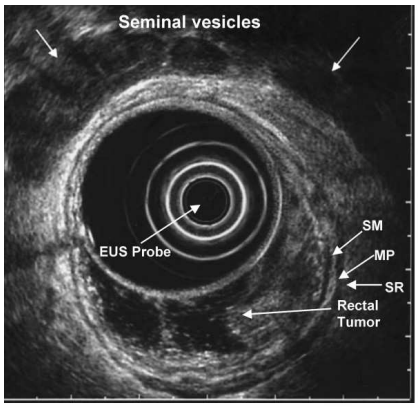
- Chemotherapy indicated for Stage III cancer
  - 5-FU, leucovorin, oxaliplatin (FOLFOX)
  - Decreases recurrence 23%
  - Increases survival 10-25%

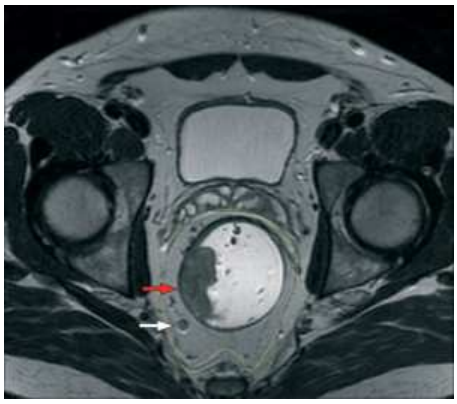
Preop staging - Rectal

- Pre-op staging for colon cancer
  - Rule out ***distant*** metastatic disease
- Pre-op staging for rectal cancer
  - Identify patient at high risk for ***local*** failure
    - Stage II (T3 or T4, node -) and III (any T, node +)

(Identify good risk early lesions)

Pre-op local staging

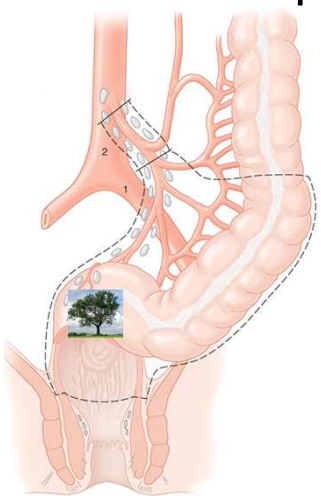




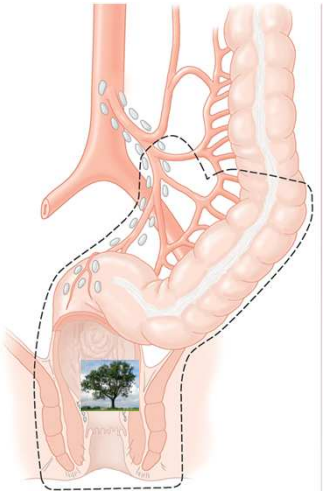
Pre-op chemoradiation

- 6 weeks of radiation
  - Chemo (5-FU) 1st and last weeks
- Wait 6-12wks for surgery
- 50-60% of patients are downstaged
  - 20% have complete pathologic response
- Decreases risk of local recurrence 13% to 6%
  - No difference in overall survival

Operations

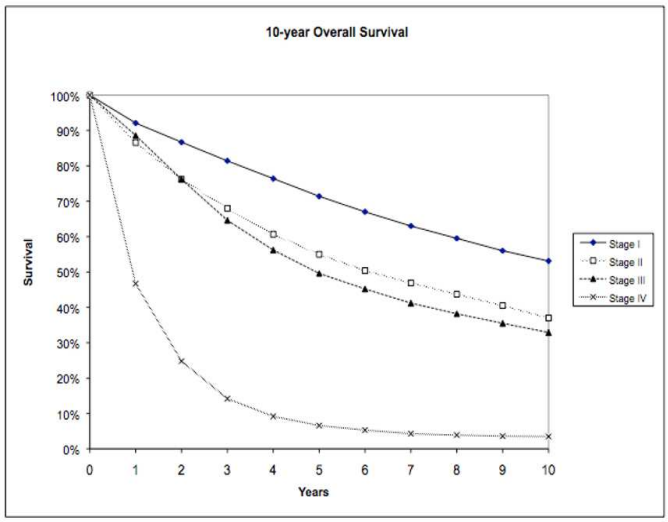


Low anterior resection or coloanal



Abdominoperineal resection (APR)

Survival Curves by stage



Stage	5yr survival
1	75%
2	55%
3	45%
4	6%

Surveillance

NCCN National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2015
Colon Cancer

NCCN Guidelines Index
Colon Cancer Table of Contents
Discussion

PATHOLOGIC STAGE[e]	ADJUVANT THERAPY[m,n]	SURVEILLANCE[t]
Tis; T1, N0, M0 T2, N0, M0	None None	Colonoscopy at 1 y ▸ If advanced adenoma, repeat in 1 y ▸ If no advanced adenoma,[u] repeat in 3 y, then every 5 y[v]
T3, N0, M0[k,l] (no high-risk features)	Clinical trial or Observation or Consider capecitabine[o] or 5-FU/leucovorin[o]	• History and physical every 3–6 mo for 2 y, then every 6 mo for a total of 5 y • CEA[w] every 3–6 mo for 2 y, then every 6 mo for a total of 5 y • Chest/abdominal/pelvic CT[h] annually for up to 5 y for patients at high risk for recurrence* • Colonoscopy[b] in 1 y except if no preoperative colonoscopy due to obstructing lesion, colonoscopy in 3–6 mo ▸ If advanced adenoma, repeat in 1 y ▸ If no advanced adenoma,[u] repeat in 3 y, then every 5 y[v] • PET-CT scan is not routinely recommended • See Principles of Survivorship (COL-G)
T3, N0, M0 at high risk for systemic recurrence[k,l] or T4, N0, M0	Capecitabine[o,p] or 5-FU/leucovorin[o,p] or FOLFOX[o,p,q,r] or CapeOx[o,p,q,r] or FLOX[o,p,q,r,s] or Clinical trial or Observation	

If Recurrence, See Workup (COL-9)

Node-positive disease, see COL-4

So what's new…

- Laparoscopy…
- Enhanced recovery protocols
- Change in approach for some rectal cancers

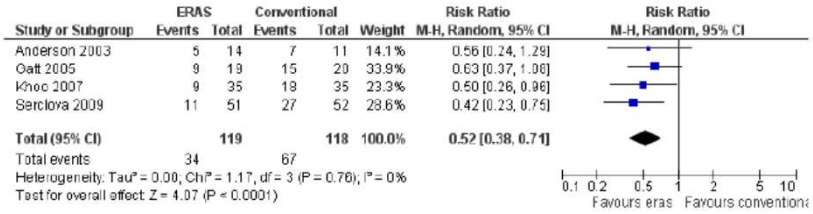
Enhanced Recovery Protocols

- What's in the protocols
  - Pre-op counseling (expectations!)
  - Carbohydrate loading
  - No bowel prep
  - Pre-medication (acetaminophen, COX inhibitor, Gabapentin)
  - Intra-op/post-op fluid restriction (normovolemia)
  - Minimal use of tubes/drains/catheters
  - Epidural/Intrathecal analgesia
  - Ketorolac postop
  - Early mobilization
  - Early feeding

Enhanced Recovery Protocols

- *Spanjersberg, Cochrane Review 2011*
  - *Complications in ERP group: 28%*
  - *Traditional group: 57%*

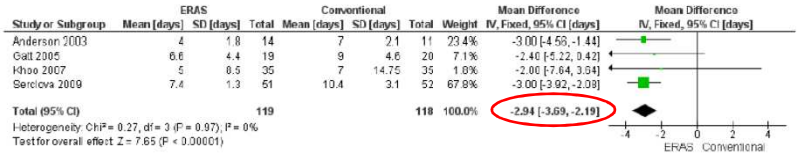
Figure 5. Forest plot of comparison: 1 Primary analyses ERAS versus conventional, outcome: 1.2 All complications.



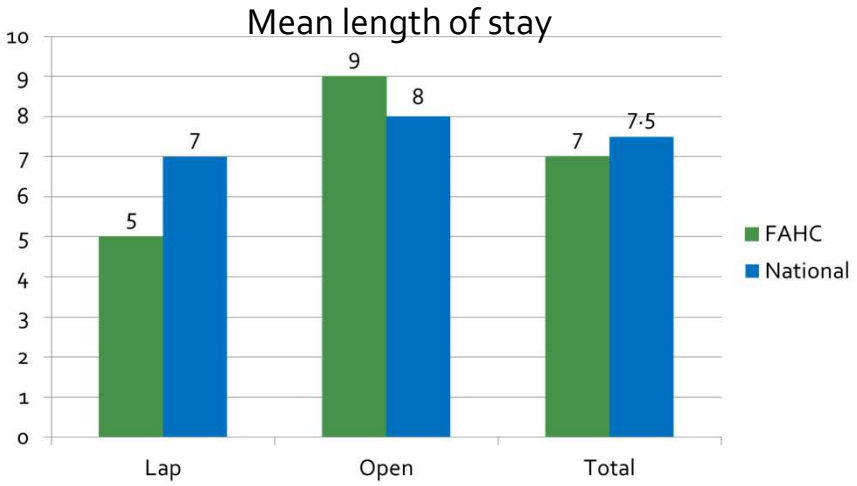
Enhanced Recovery Protocols

- *Spanjersberg, Cochrane Review 2011*

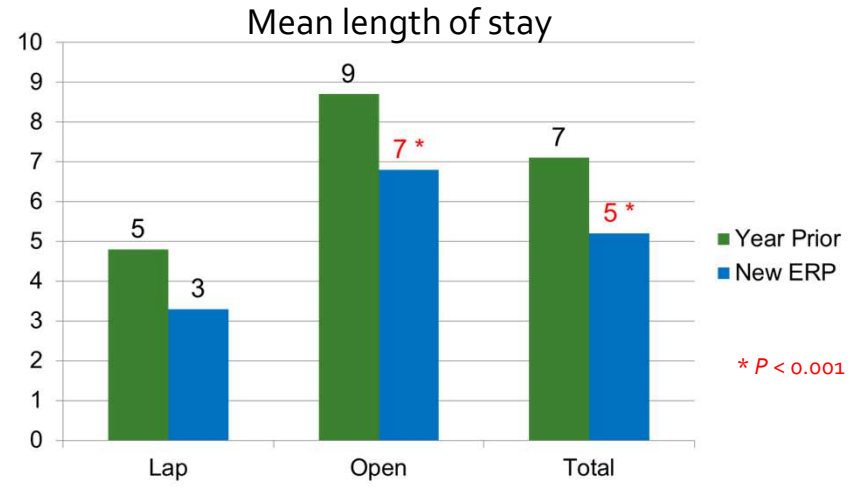
Figure 10. Forest plot of comparison: 1 Primary analyses ERAS versus conventional, outcome: 1.7 hospital stay [days].



Where we were…2011

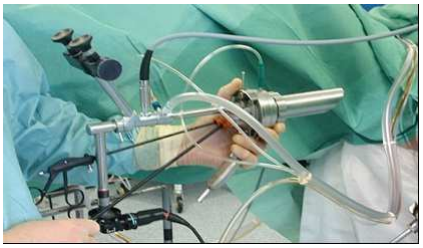


Results – length of stay



Rectal cancer

- Moving away from radiation for all stage II & III
- Moving away from radical resection for some early, low risk cancers



Thanks!