



A Teaching Affiliate
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The Role of the Medical Oncologist in Regional Therapies for Stomach Cancer

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CANCER CENTER

Disclosures

- Consulting/Advisory: Merck, BMS, Pieris, Eli Lilly, Foundation Medicine, Pieris
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Overview

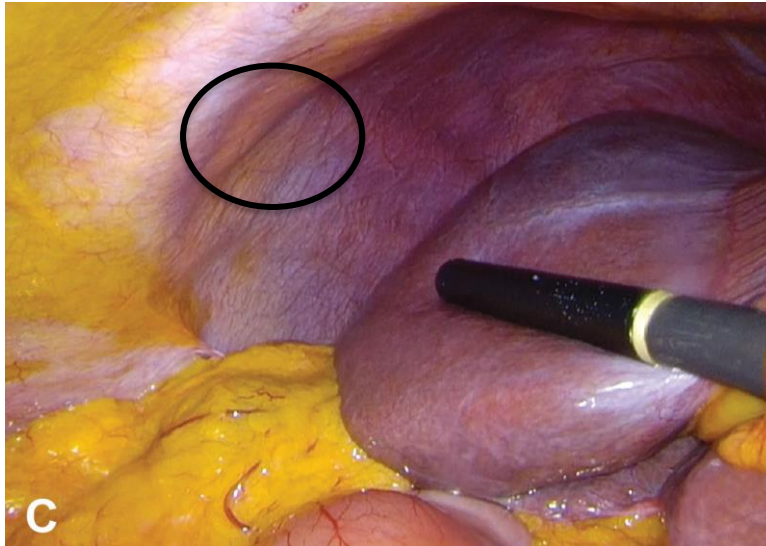
- Brief Anatomy Lesson
- A Reminder on Staging
- Multidisciplinary Patient Selection
- Questions to Ask Your Team

Peritoneum: The Saran Wrap of the Abdomen



- Peritoneum is a membrane lining the abdominal cavity.
- Covers most intra-abdominal organs.
- Composed of a mesothelial lining cells and connective tissue
- Has a parietal (abdominal and pelvic wall) and visceral component (wrapped around organs).
- Space is called peritoneal cavity and normally contains about 50mL of fluid for lubrication

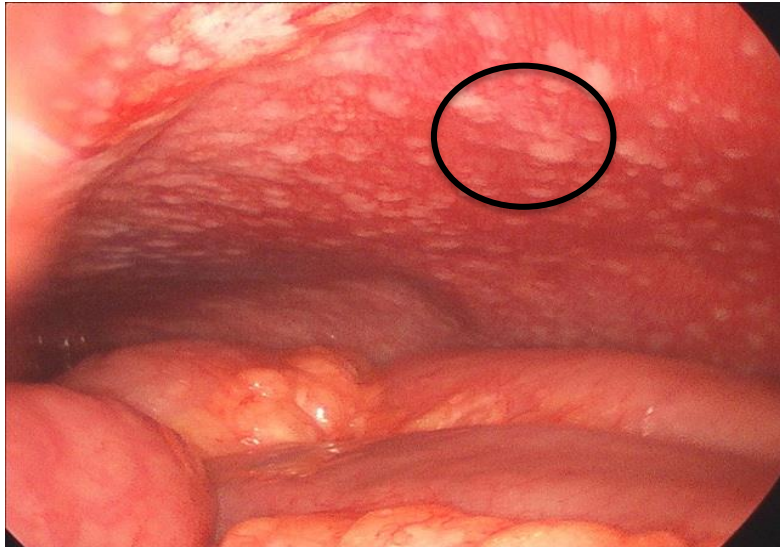
Peritoneal Disease: Sand on a Countertop



Peritoneal Carcinomatosis = Cancer involving the peritoneal lining

Causes:

1. Colon Cancer – 10-35%
2. **Gastric Cancer – 40-50%**
3. Ovarian Cancer – 70-75%
4. Appendix Cancers
5. Abdominal Mesotheliomas

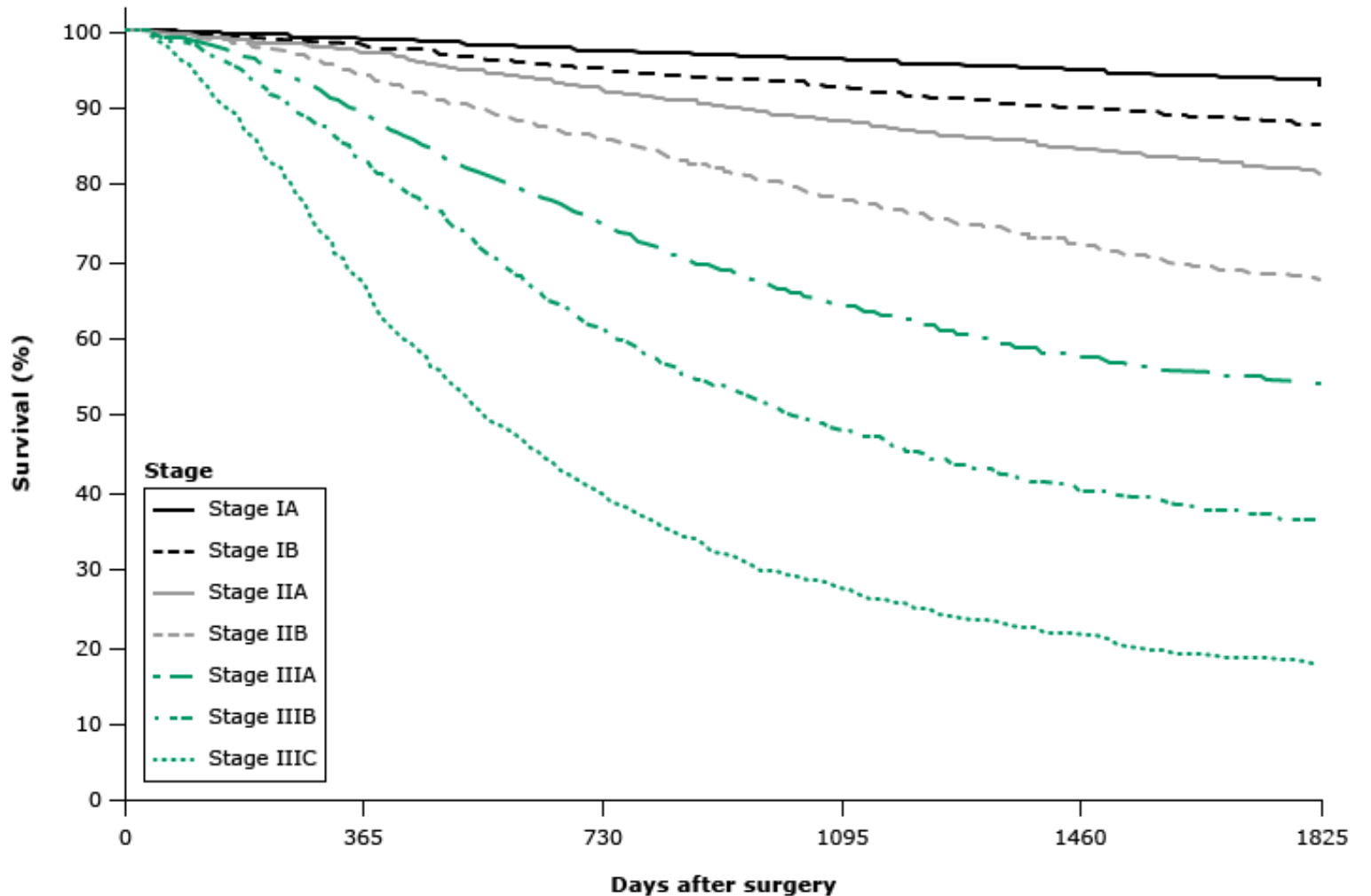


Symptoms

- A. Bloating/gassy feeling
- B. Early satiety, loss of appetite
- C. Nausea
- D. Bowel habit changes
- E. Weight loss (can be gain if ascites)
- F. Often no symptoms

Why Do We Stage Patients?

- To determine to extent and locations of disease
- Because it informs survival!
- To guide shared decision making with patients



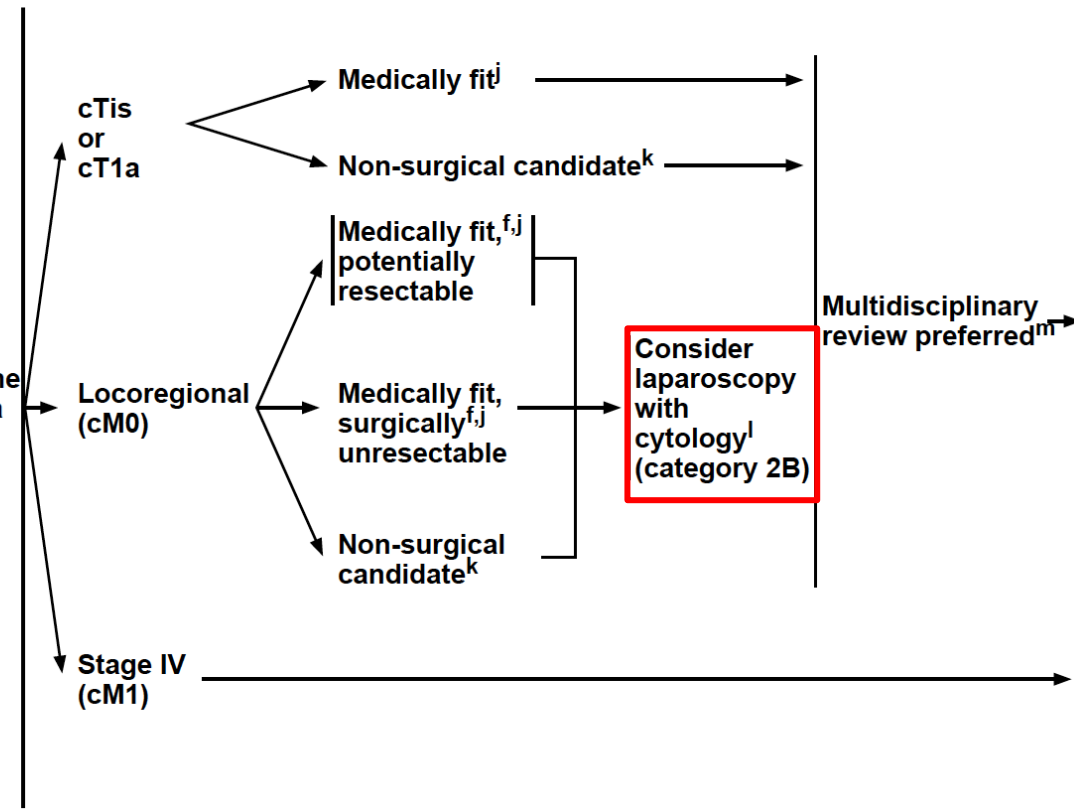
The Problem of the Peritoneum

- The peritoneum is not well seen on CT, PET, or MRI
- Don't forget diagnostic laparoscopy in staging!!
- We recommend for all clinical T1b or greater who are potential surgical candidates

WORKUP

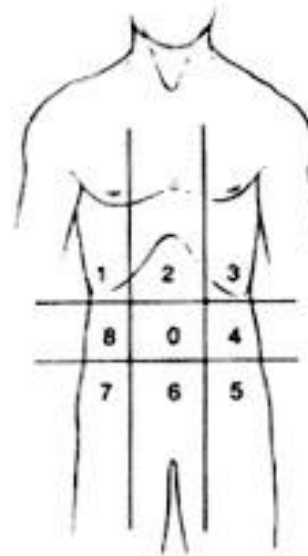
- H&P
- Upper GI endoscopy and biopsy^a
- Chest/abdomen/pelvic CT with oral and IV contrast
- FDG-PET/CT evaluation (skull base to mid-thigh) if no evidence of M1 disease^b and if clinically indicated
- CBC and comprehensive chemistry profile
- Endoscopic ultrasound (EUS) if early-stage disease suspected or if early versus locally advanced disease needs to be determined (preferred)
- Endoscopic resection (ER) is essential for the accurate staging of early-stage cancers (T1a or T1b)^c
- Biopsy of metastatic disease as clinically indicated
- MSI-H/dMMR testing if metastatic disease is documented/suspected^d
- HER2 and PD-L1 testing if metastatic adenocarcinoma is documented/suspected^{d,e}
- Assess Siewert category^f
- Nutritional assessment and counseling
- Smoking cessation advice, counseling, and pharmacotherapy as indicated^g
- Screen for family history^h

CLINICAL STAGEⁱ



Stratifying Peritoneal Disease – The PCI

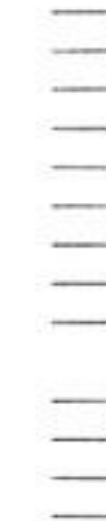
- We need a shared language among multi-D teams to discuss patients.
- The PCI helps evaluate extent of disease in the peritoneal cavity.
- Maximal score is 39 (13 x 3) and minimum is 0.
- Then we can group patients by PCI scores to examine impact on outcome.



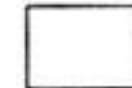
Regions

- 0 Central
- 1 Right Upper
- 2 Epigastrium
- 3 Left Upper
- 4 Left Flank
- 5 Left Lower
- 6 Pelvis
- 7 Right Lower
- 8 Right Flank
- 9 Upper Jejunum
- 10 Lower Jejunum
- 11 Upper Ileum
- 12 Lower Ileum

Lesion Size

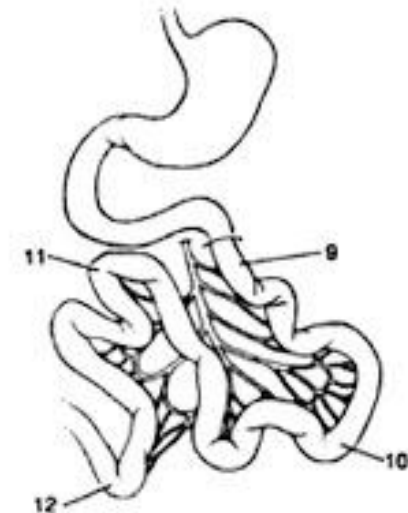


PCI



Lesion Size Score

- LS 0 No tumor seen
- LS 1 Tumor up to 0.5 cm
- LS 2 Tumor up to 5.0 cm
- LS 3 Tumor > 5.0 cm or confluence

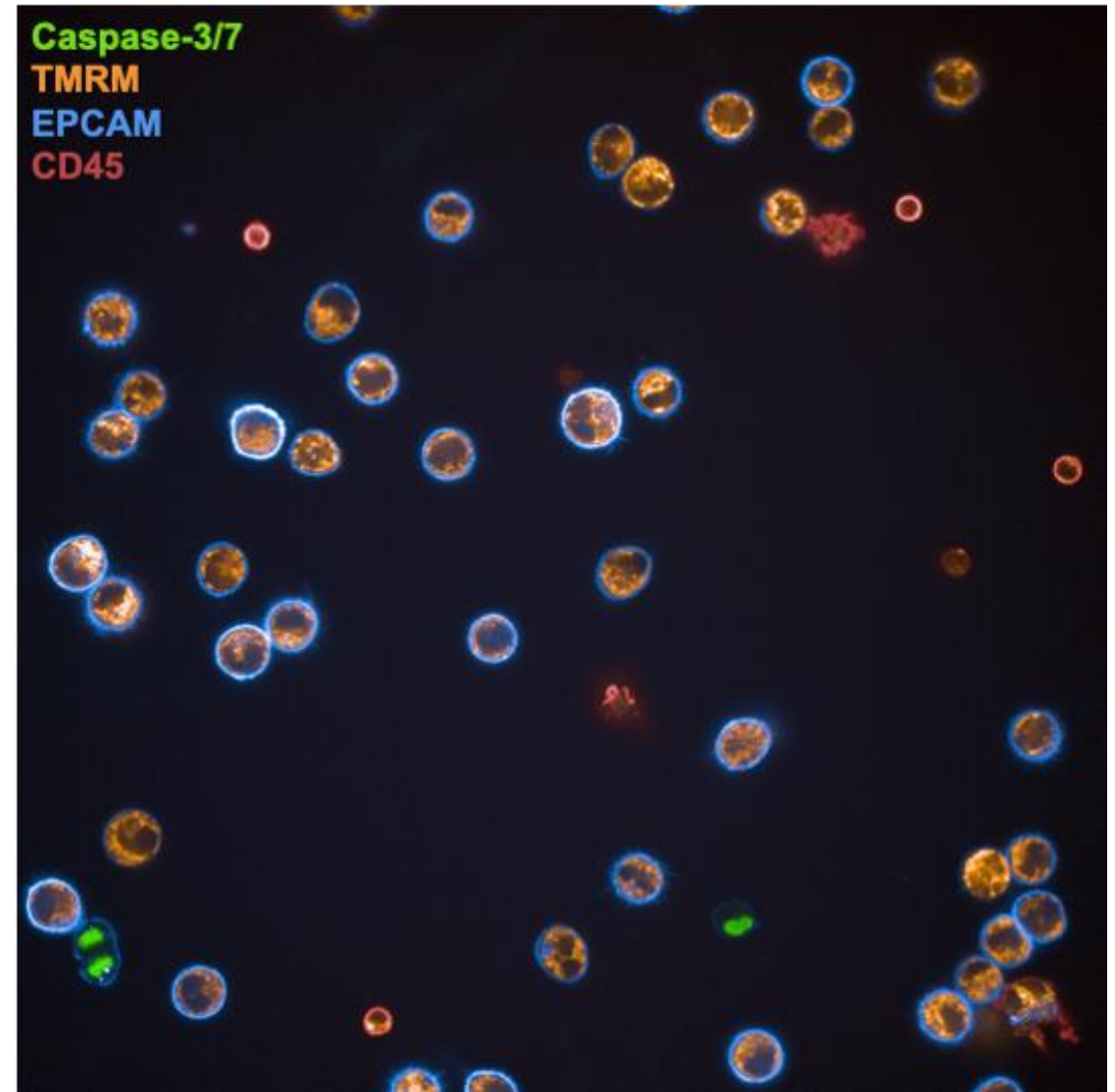


Right Tool, Right Job, Right Way

- Biologic understanding is the foundation of therapy development
- We know very little about peritoneal biology and this is a barrier to treatment
- Consider research participation
- The national CountMeIn project offers an opportunity to donate ascites for study

<https://escproject.org/home>

<https://pattern.org/>



Regional Therapy Considerations

- What is the status of the systemic disease?
- What is the burden of peritoneal and extraperitoneal disease?
- What is the goal of regional therapy?
- What do we know about the tumor?
- Do we have trials that may be appropriate?
- What data do we have to speak to this situation?

Conclusions

- Regional stomach cancer approaches requires a multi-disciplinary team
- Peritoneal disease defines stage IV stomach cancer
- One of the key medical oncologist roles is ensuring adequate staging and molecular tumor information
- Shared language and objective criteria are critical so we can understand and compare our regional therapy data
- Prospective clinical trials are the optimal method to define the optimal patients and optimal approaches

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