

# Colorectal Cancer Surgery

Erie St. Clair Regional Cancer Program  
Cancer Education Days  
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General & Colorectal Surgery

# Presenter Disclosure

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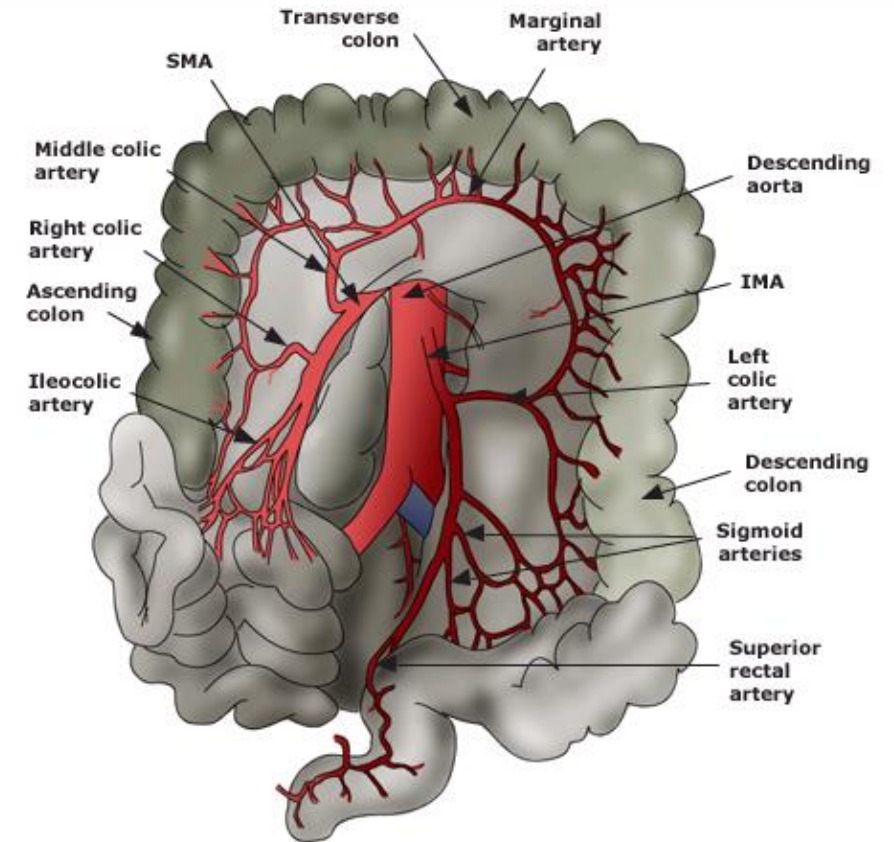
# Objectives

- Role of surgery in management of colon and rectal cancer
- Operative technique for surgical resection
- Palliative surgery
- New approaches in rectal cancer

# Role of Surgery for Colon & Rectal Cancer

- Only curative modality for localized disease
- Goal is to remove the tumour, major vascular pedicle, and the lymphatic drainage basin of the affected colonic segment

Arterial circulation to the large bowel



IMA: inferior mesenteric artery; SMA: superior mesenteric artery.

# Colon Cancer

- Cancers occurring anywhere in the colon or large bowel *except* in the last 15cm of bowel
- Surgical resection is first line therapy for cancers in the absence of metastatic disease
- Initial pre-operative work-up includes
  - Colonoscopy with biopsy,
  - CT chest/abdo/pelvis
  - CEA level

# Rectal Cancer

- Management is more dependent on anatomy of cancer
  - Proximal, Mid, Distal Rectum
- Patient's undergo clinical staging with MRI Rectum prior clinical decision making
- Most Stage II & III disease (T3, T4 or any N) will undergo long course (6 week) radiation and chemotherapy (5-FU)
  - Surgery scheduled 8-12 weeks following completion of therapy

# Surgical Technique

- Open versus laparoscopic versus robotic
- No clear oncologic advantage with technique with similar morbidity and mortality
- Most advantages are in patient recovery
  - Less pain
  - Lower rate of ileus

# Surgical Technique

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

## A Comparison of Laparoscopically Assisted and Open Colectomy for Colon Cancer

The Clinical Outcomes of Surgical Therapy Study Group\*

ORIGINAL CONTRIBUTION

## The ALCCaS Trial: A Randomized Controlled Trial Comparing Quality of Life Following Laparoscopic Versus Open Colectomy for Colon Cancer

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➤ **Laparoscopic versus open surgery for rectal cancer (COLOR II):  
short-term outcomes of a randomised, phase 3 trial**

Martijn H G M van der Pas, Eva Haglund, Miguel A Cuesta, Alois Fürst, Antonio M Lacy, Wim C J Hop, Hendrik Jaap Bonjer, for the Colorectal cancer Laparoscopic or Open Resection II (COLOR II) Study Group\*



# Surgical Technique

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## A Comparison of Laparoscopically Assisted and Open Colectomy for Colon Cancer

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- Similar rates of recurrence between laparoscopic and open colectomy
- Post operative recovery faster in laparoscopic group
  - Less narcotic use
  - Shorter hospital stay
- Similar complication rate, rates of readmission
- Overall survival rate at three years similar
  - 86% laparoscopic versus 85% open

# Surgical Technique

- Laparoscopic surgery had better quality of life post-operatively at 2 months post-surgery

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# Surgical Technique

- 3 years locoregional recurrence was 5% in each study group
- 3 year disease free survival was 74.8% in the laparoscopic surgery group versus 70.8% in the open surgery
- Laparoscopic surgery had less blood loss, bowel function returned sooner, shorter hospital stay,

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# Surgical Palliative Care

- Surgical intervention to alleviate pain, obstruction, or bleeding in the setting of incurable disease
- Usually involves formal resection, intestinal bypass, or diversion with colostomy or ileostomy
- Colonic endoscopic stenting can be a non-invasive technique to palliate obstructive symptoms

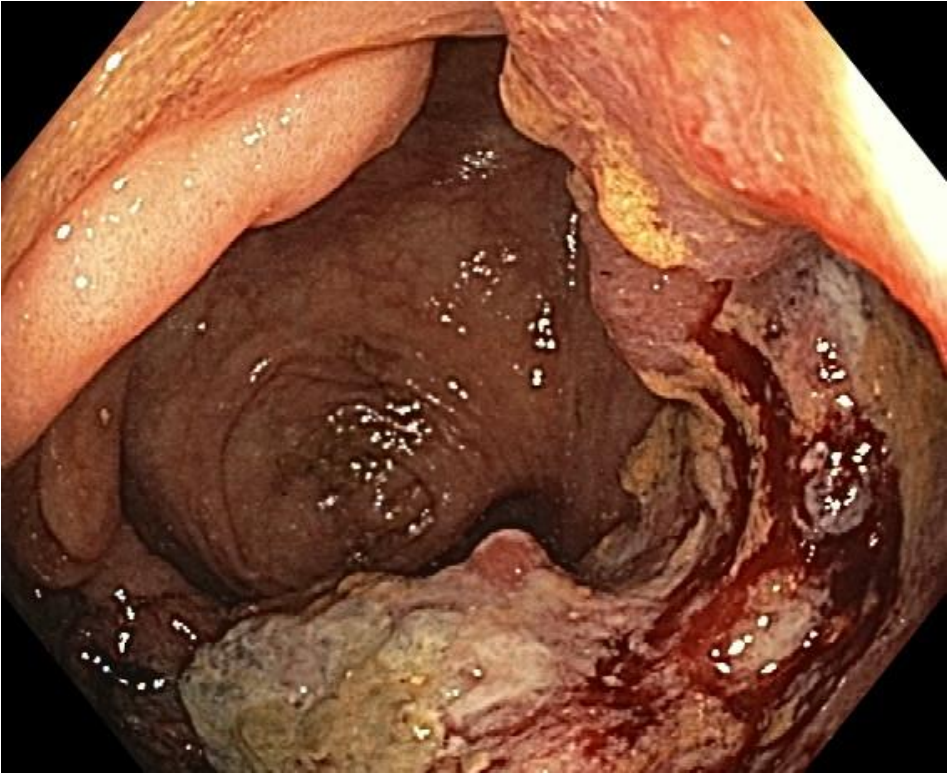
# New Approaches to Rectal Cancer

- Total Neoadjuvant Therapy
- Local Excision of Rectal Tumours
- Transanal Total Mesorectal Excision (TaTME)

# Surgical Case

- 52 year old female in generally good health is found to have new microcytic anemia on routine lab work
- Send for endoscopic assessment as it had been greater than ten years since last colonoscopy
- Esophagogastroduodenoscopy was normal
- Colonoscopy – ulcerated lesion in cecum
  - Biopsy Adenocarcinoma

# Surgical Case



# Surgical Case

- CT chest/abdo/pelvis
  - Solitary liver metastasis in segment VI





# Surgical Case

- Patient was reviewed at Multidisciplinary Cancer Conference
- Underwent six rounds of FOLFOX with favorable response
- Subsequently underwent synchronous resection of liver metastasis and right colon

# References

- Martijn HGM, Haglind E, Cuesta MA et al. Laparoscopic versus open surgery for rectal cancer (COLOR II): short-term outcomes of a randomized, phase 3 trial. *Lancet Oncol* 2013; 14:210-18
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