





**OWN  
YOUR  
HEALTH**

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COMMUNITY FORUMS




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## Colon Cancer


Colon Cancer:  
Can we silence the killer?  
Screening and prevention

Modern treatment  
of Colon Cancer



## I Have Colorectal Cancer - How can I beat it?

**Carl J. Brown, MD MSc FRCSC**  
St. Paul's Hospital and  
University of British Columbia  
June 17, 2009



## Are You the Picture of Health?


"You might look and feel fine, but you need to get the inside story. Colorectal cancer often has no symptoms, so please get tested. I did."

*Katie Couric, Co-Founder  
EIF's National Colorectal Cancer Research Alliance*



Screening can detect precancerous polyps so they can be removed before they turn into colorectal cancer.

If you're 50 or older, talk to your doctor and get screened.



The **colon** (large intestine) primarily absorbs fluid

The **rectum** is a reservoir that holds stool until defecation

The **anus** is the muscle complex that acts as a valve, controlling defecation

## Background

- Lifetime risk of colorectal cancer is 6.5%
  - Rectal cancer 30% of this risk
- Surgical removal of the cancer is the only chance for cure

## Background

## Colon Cancer Demographics

Men and Women are at equal risk!!!

Stage	Percentage
Stage I*	12%
Stage II*	24.5%
Stage III*	32.6%
Stage IV*	18.6%

12.3% of patients presented with recurrent CRC. \*2002 data.

## Principles of Treatment of CRC

- Primary Treatment
  - Surgery
    - Complete removal of cancer needed for cure
- Adjuvant (Extra) Treatment
  - Radiation
    - Important for rectal cancer
    - Not used in colon cancer
  - Chemotherapy
    - Important for destroying microscopic disease throughout the body

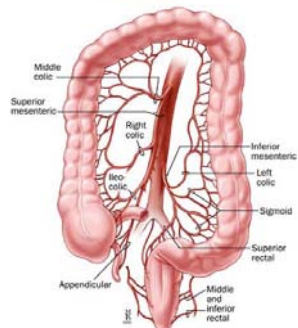


## Principles of Colorectal Cancer Surgery

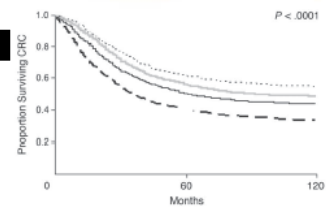
- Cure
  - Complete removal of tumour
- Palliation
  - Relief of bowel obstruction, bleeding or perforation
- Staging
  - Removal of tumour, lymph node basin and apparent metastatic deposits



## Principles of Surgery Lymph Node Removal



## Importance of LN Harvest



No. at risk:

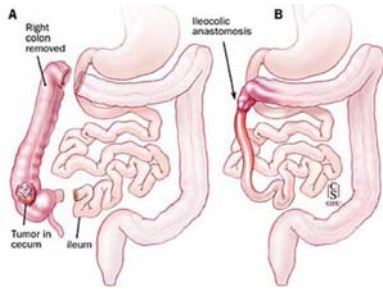
≤ 3 negative nodes	2,239	539	139
4-7 negative nodes	1,699	582	162
8-12 negative nodes	1,270	518	145
≥ 13 negative nodes	1,268	582	150



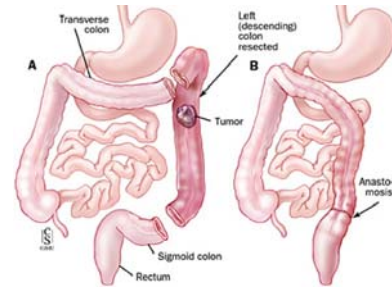
>13 neg nodes  
8-12 neg nodes  
4-7 neg nodes  
< 3 neg nodes

Johnson et al. J Clin Oncol 2006; 24:3570-75

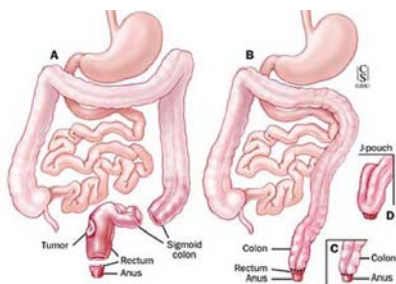
## Surgery for Cancer Right Hemicolectomy



## Surgery for Colon Cancer Left Hemicolectomy



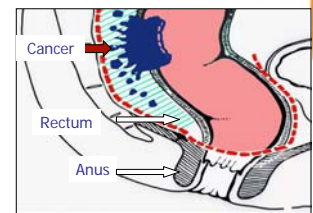
## Surgery for Rectal Cancer



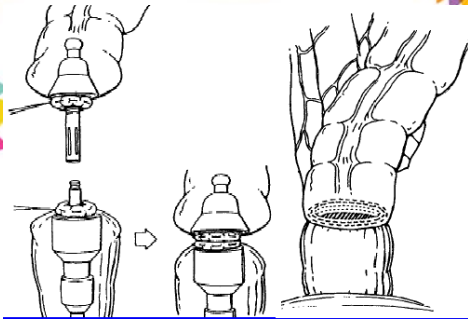
## Surgery for Rectal Cancer Total Mesorectal Excision (TME)



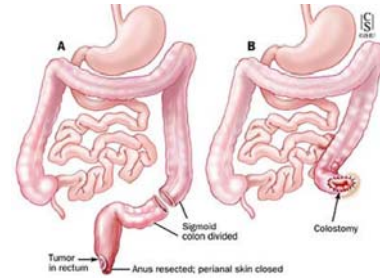
- Removal of Rectal Cancer and All Lymph Nodes



## Surgery for Rectal Cancer- Surgical Technique



## Surgery for Rectal Cancer Abdomino-Perineal Resection (APR)



## Surgery for Colon Cancer- What to Expect



- Admit to hospital on day of surgery
- Undergo surgical removal of bowel and reconnection
- Stay in Hospital 3-7 days
- Go home when
  - Bowels are working (passing gas)
  - Pills for pain control
- Recover over next month or two

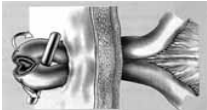
## Surgery for Rectal Cancer - What to Expect



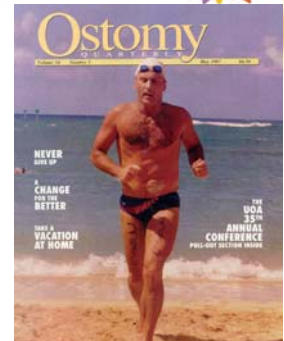
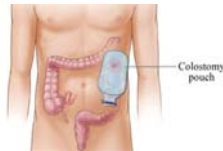
- Radiation treatment
  - 5 days for small tumours
  - 5 weeks for bigger tumours
- Surgery
  - 1 week after “short” radiation
  - 6 weeks after “long” radiation
  - Combined with Chemotherapy

## Surgery for Rectal Cancer - What to Expect

- Most patients will have a “diverting ileostomy”
- Prevents stool from going through the bowel connection
- A second surgery is required to close the ileostomy
  - Much smaller surgery than the cancer removal procedure



## Surgery for Rectal Cancer- Permanent Stoma



## Chemotherapy

- Stage III Colon Cancer and Stage II and III Rectal Cancer
  - 4-8 weeks after surgery
  - Intravenous infusion of 3 Chemotherapy agents every 2 weeks for 6 months
- Stage IV Colon or Rectal Cancer
  - Tailored treatment to extend life



## Colorectal Cancer Surgery At St Paul's Hospital



## Keyhole (Laparoscopic) Surgery



- Remove tumour through small incision and join bowel
- Less pain and shorter postoperative recovery

EXPERT  
REVIEWS

### Advances in minimally invasive surgery in the treatment of colorectal cancer

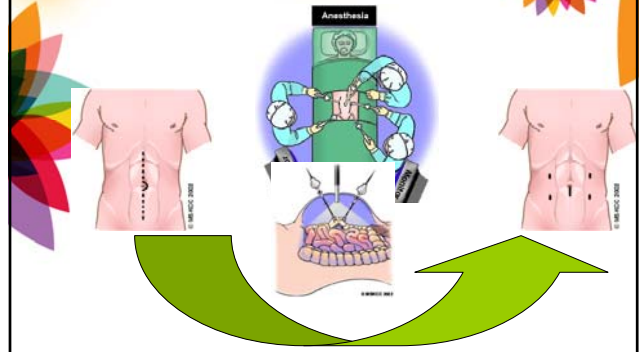
*Expert Rev. Anticancer Ther.* 8(1), 111-123 (2008)

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Colorectal cancer (CRC) is the second leading cause of cancer-related death in the USA. Surgery is the primary treatment for most patients with CRC. Over the past 15 years, minimally invasive techniques for colorectal surgery have been developed. There is growing evidence that these techniques have significant advantages in short-term outcomes (e.g., postoperative pain and length of hospital stay) with similar long-term recurrence and overall survival. While transanal local excision has been shown to be inferior to radical resection for early rectal cancer, transanal endoscopic microsurgery (TEM) is a minimally invasive technique that appears to facilitate local excision in appropriate patients. TEM combined with radiotherapy has demonstrated promising early results and is currently being investigated in clinical trials as a potential alternative to radical surgery. We summarize the current literature on these minimally invasive approaches to CRC.

## Laparoscopic Surgery

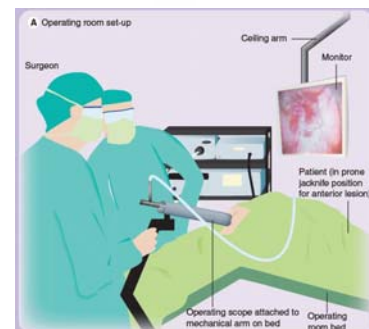


## Surgery for Rectal Cancer- NOTES Procedure




- Slightly higher local recurrence of cancer
- However, still appropriate in select patients (high medical comorbidity)

## Transanal Endoscopic Microsurgery (TEM)



# Transanal Endoscopic Microsurgery (TEM)



video



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**Colorectal Surgery at St Paul's Hospital**

At St. Paul's hospital we have developed a center of excellence in colorectal surgery with a specific focus on colorectal cancer, inflammatory bowel disease, and other diseases of the lower gastrointestinal tract.

Surgeons with subspecialty training work in collaboration to treat patients with colorectal diseases at St. Paul's Hospital. As a University of British Columbia teaching hospital, St. Paul's serves as a training center for colorectal surgeons and is a leader in the research and treatment of patients with colorectal diseases.

[www.colorectalsurgeryphc.org](http://www.colorectalsurgeryphc.org)



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### Colon and Rectal Cancer - British Columbia

Global

**Basic Info**  
 Type: Common Interest - Health & Wellness  
 Description: I am a surgeon in Vancouver who specializes in colorectal cancer treatment. I wanted to create a forum for people with colon and rectal cancer and their families and friends to share their experiences and concerns. I hope to include relevant links to online educational material for people with colorectal cancer who live in British Columbia.

**Contact Info**  
 Website: <http://www.colorectalsurgeryphc.org>

**Members**  
 Displaying 5 members See All

**Discussion Board**  
 Displaying 1 discussion topic Start New Topic | See All

**Group Type**  
 This is an open group. Anyone can join and invite others to join.

**Admins**

"The people in cancer clinics all over the world need people who believe in miracles.

I am not a dreamer, and I am not saying that this will initiate any kind of definitive answer or cure to cancer.

But I believe in miracles.

I have to."

*Terry Fox, October 1979*

