

Colon Cancer

Pathogenesis

Normal epithelium → dysplastic ACF → early adenoma → late adenoma → carcinoma → metastatic carcinoma

Adenomas/polyps

- Extra tissue that grows in the colon
- ↑Polyp size = ↑cancer risk
- Symptoms: bleeding, irregular bowel (diarrhea, constipation)

Risk factors

- Advanced age: >50 y/o
- Personal or family history: adenomas/polyps, colon cancer, IBD
- Inherited syndromes: familial adenomatous polyposis (FAP), Lynch Syndrome (HNPCC)
- Lifestyle: Western diet, sedentary lifestyle, obesity, heavy alcohol use, smoking

Protective factors

- Lifestyle: diet high in fruits & vegetables, ↑dietary Ca & Vit D, regular physical activity
- Regular use of ASA or NSAIDs: ↓PGE2 levels

Screening

- **FOBT** | fecal occult blood test: high false neg rate, best if used with other tests, ↓mortality by 1/3
 - **DRE** | digital rectal exam
 - **Endoscopy**: flexible sigmoidoscopy, examines lower 60% of bowel
 - **Colonoscopy**: examines whole bowel, can remove pre-malignant lesions during procedure
 - **Recommendations**
 - Begin screening at 50 y/o
 - Colonoscopy: q10yr, preferred
 - Flexible sigmoidoscopy: q5yr
 - Double contrast barium enema: q5yr
 - FOBT, FIT: annually
 - CT colonography (virtually colonoscopy): q5yr
 - Stool DNA test: value currently unknown
- *if any test comes back abnormal, still need to confirm with colonoscopy

Clinical presentation

	Right colon	Left colon	Rectum
<i>Pain</i>	Ill defined	Colicky	Steady, gnawing
<i>Obstruction</i>	Infrequent	Common	Infrequent
<i>Bleeding</i>	Brick red	Red, mixed with stool	Bright red, coating stool
<i>Weakness</i>	Common	Infrequent	Infrequent

Diagnosis

- Biopsy detected lesions
- Staging: CSR, abdominal/pelvic CT scan, CBC, LFTs, UA, CEA level
 - Stage I: cancer grown through mucosa
 - Stage II: cancer grown through wall
 - Stage III: lymph node involvement
 - Stage IV: metastases

MCRC: Intensive Therapy

Initial Therapy

- FOLFOX ± (BEV or panitumumab*)
- FOLFIRI + BEV
- FOLFIRI ± (cetuximab* or panitumumab*)
- CapeOX ± BEV
- (5FU/LV or capecitabine) ± BEV

Progression After First Therapy

- FOLFOX, FOLFIRI or CapeOX
- FOLFIRI + (cetuximab* or panitumumab*)
- Irinotecan ± oxaliplatin (IROX)
- Irinotecan + (cetuximab* or panitumumab*)
- Cetuximab or panitumumab*

Progression after second Therapy

- (Cetuximab* or panitumumab*) ± irinotecan

Chemotherapy for Patient Not Appropriate for Intensive Therapy

Initial Therapy

- Capecitabine or infusional 5FU/LV ± bevacizumab
- Cetuximab
- Panitumumab

Therapy after 1st progression

- No improvement in functional status
- **Best supportive care**
- Improvement in functional status
- **Initial therapy**