Colon cancer Algorithm
Please review definition and pathophysiology when using the algorithm

Assess for the presence of risk factors, both major and minor or contributing increasing age
Familial polyposis, Familial nonpolyposis colon cancer, are cancers of genetic risk
Alcohol consumption is a risk factor for gastrointestinal cancer
obesity, fat intake, consumption of red meat
Tobacco smoking is associated with a higher risk of colon cancer
The risk of colon cancer may be decreased among women who recently used postmenopausal hormone replacement therapy.
Source: http://www.emedicine.com/MED/topic413.htm#section~Followup

Are Risk Factors Present?

YES

Perform ASC screening for colon cancer

Are positive findings present?

NO

Initiate client education for Health Seeking Behaviors to identify:
Eat a high fiber low fat diet
Maintain ideal body weight and exercise regularly
Avoid environmental triggers
Don't smoke or drink alcohol
Explain that identification and removal of colorectal cancer precursor lesions (ie, polyps) can reduce incidence of colorectal cancer
Beginning at age 50, both men and women at average risk should be screened:
- flexible sigmoidoscopy every 5 years*
- colonoscopy every 10 years
- double contrast barium enema every 5 years*
- virtual colonoscopy every 5 years*
- FOBT at home every year*,
- fecal immunochemical test (FIT) at home every year*,
*Colonoscopy should be done if test results are positive.
Seek additional testing if you have a family history of polyposis and nonpolyposis cancer
Teach s/s of colon cancer to report

Are positive findings present?

NO

Available screening tests:

Flexible sigmoidoscopy
Colonoscopy
Double contrast barium enema
Virtual colonoscopy
Fecal occult blood test
Fecal immunochemical test

Initiate the plan of care for a Risk for Ineffective Therapeutic Regimen management:
- Discuss sites of colon cancer metastasis and risk for recurrence.
- Teach client about treatment strategies; surgery, chemotherapy, radiation
- Discuss need for prescribed daily supplements of vitamins and minerals, such as calcium. You also may need injections of vitamin B12.
- Teach client s/s of recurrence and complications; pleural effusion, hepatomegaly, peritoneal effusions, obstructions to gastric outlet and small bowel, GI bleeding
- Lifestyle modifications
- Medication therapy
- Procedures, surgical interventions that may be required
- Signs and symptoms to report to their doctor that indicates that they are experiencing a complication
- Periodic follow-up

Follow collaborative plan of care for a client with PC: colon cancer metastasis, PC:GI bleed, PC:Bowel Obstruction, PC: bowel perforation, diarrhea vs constipation, Imbalanced Nutrition
See cancer care algorithm
See Surgical care algorithm

Potentially unstable?

Newly diagnosed?

Periodic follow-up

Susan McCabe revised 10/09
## Collaborative Problem

### OUTCOMES/BENCHMARKS:
No complaints of GI dysfunction, liver dysfunction, adrenal dysfunction, respiratory dysfunction, bone pain and Pancytopenia, focal neurological deficit

### Potential Complication: Colon cancer metastasis (mets)

**ASSESS s/s of Colon cancer metastasis**

**s/s of colon cancer**
- Change in bowel habits
- GI bleeding
- Abdominal pain and mass
- Constitutional signs of cancer

**s/s of metastasis**
- s/s of GI dysfunction; change in bowel habits, bleeding, pain, cramps, masses, change in bowel sounds, increased abdominal girth
- S/s of Pancytopenia
- Liver; jaundice, hepatomegaly
- Lung; pleural effusion
- Brain; focal neurological deficit
- Adrenal glands: electrolyte disturbance, fluid balance disturbance
- s/s of bone mets; pain, fracture myelosuppression

**Assess for contributing factors:**
- Advancing age
- Family history
- Inflammatory bowel disease
- Poor diet, smoking, obesity

**Monitor for presence of Colon cancer mets**

Monitor VS to identify organ dysfunction
Monitor CBC to identify Pancytopenia, anemia, which may be caused by bleeding, liver dysfunction, bone metastasis or poor nutrition
Monitor results from endoscopy and biopsy
Monitor LFTs to identify liver dysfunction
Monitor abdominal films for signs of obstruction perforation
Monitor chest Xray results to identify lesions
Monitor CT chest, abdomen pelvis, to confirm lesions, metastasis and extent of disease
Monitor daily weight, I/O electrolytes to identify endocrine disturbance
Monitor CEA levels preoperatively

**Additional assessment includes monitoring from presence of complications**

Initiate Review of systems and physical exam to identify complications of peritoneal and pleural effusions; bowel obstruction GI bleeding and recurrence of cancer if treated

### DO

**Perform nursing actions that minimize metastasis**

Provide therapy according to stage
- Radiation
- Chemotherapy
- Targeted therapy with monoclonal antibodies

Expect client to undergo surgical resection of the colon and intestinal diversion depending on the type, size and location of lesion
- If performed; monitor for early complications of anastomotic failure, bleeding, ileus, and ostomy failure

**Performs nursing actions to control contributing factors**

Provide cancer care to address side effects of chemo/radiation and surgery, pain, fatigue, nausea, myelosuppression, DVT, depression, caregiver role strain, protein calorie malnutrition, pathological fracture, constipation vs. diarrhea

### CALL

- Call MD for recurring GI dysfunction, peritoneal signs or GI bleeding, complications of pleural effusion, myelosuppression, bone pain, focal neurological deficit, s/s of liver dysfunction electrolyte disturbance or fluid balance disturbance.
- If present, ensure adequate airway, breathing establish IV access and initiate shock management of bleeding is present, provide supportive care and contact rapid response team and MD