Bowel Obstruction (BO) Algorithm
Please review definition and pathophysiology when using the algorithm

Assess for the presence of Colonic BO risk factors:
The most common cause of SBO is postsurgical adhesions
The second most common identified cause of SBO is an incarcerated groin hernia
Malignant tumor, inflammatory bowel disease, volvulus
Source: http://www.emedicine.com/emerg/TOPIC66.HTM#section~Clinical

Assess for the presence of large BO risk factors:
Malignancies
diverticular disease
colonic volvulus
Colocolic intussusceptions involve only the colon
Source: http://www.emedicine.com/emerg/TOPIC65.HTM#section~Clinical

Monitor for presence of signs/symptoms:
- Abdominal Pain, often described as crampy and intermittent
- Abdominal distention
- Nausea, Vomiting
- Diarrhea (an early finding)
- Constipation (a late finding)
- Fever and tachycardia
- Hyperactive bowel sounds occur early as GI contents attempt to overcome the obstruction.
- Hypoactive bowel sounds occur late.
- Peritoneal signs

Initiate client education for Health Seeking Behaviors to identify:
- Eat a high fiber diet
- Drink plenty of fluids
- Avoid excessive use of cathartics
- Maintain ideal body weight
- Perform physical activity on most days of the week
- Teach about risk factors and s/s to report

Initiate the plan of care for a Risk for Ineffective Therapeutic Regimen management:
Teach client about course and progression of illness.
Explain that some obstruction can be managed nonsurgically through bowel decompression and rest, with adequate supportive care.
Antibiotics are administered prophylactically to minimize complications of peritonitis
Clients may require surgical intervention especially if ischemia and necrosis are likely
Teach client to report worsening pain, confusion, fever, dyspnea, palpitations and decreased urine output.

Follow collaborative plan of care for a client at risk for perforation peritonitis
Collaborative Problem

Potential Complication: Perforation/peritonitis

**ASSESS for Perforation/peritonitis**
- Abdominal Pain, often described as crampy and intermittent
- Abdominal distention
- Nausea, Vomiting
- Diarrhea (an early finding)
- Constipation (a late finding)
- Fever and tachycardia
- Hyperactive bowel sounds occur early as GI contents attempt to overcome the obstruction.
- Hypoactive bowel sounds occur late.
- Peritoneal signs, rigid abdomen

**Assess for contributing factors:**
- Previous abdominal or pelvic surgery, previous radiation therapy, or both (may be part of patient's medical history)
- History of malignancy (particularly ovarian and colonic)
- History of chronic constipation, long-term cathartic use, and straining at stools

**Monitor for presence of Perforation/peritonitis**
- Monitor VS for tachycardia, tachypnea and hypotension
- Monitor pulse oximetry for declining O2 saturation
- Monitor ABGs for metabolic alkalosis
- Monitor cardiac monitor for dysrhythmia
- Monitor for increased or decreased temperature
- Monitor CBC for left shift and bands
- Monitor electrolytes for azotemia and electrolyte disturbance (sodium and potassium losses)

- Monitor abdominal x-ray for free air under diaphragm or presence of air-fluid pattern
- Monitor reports from CT scans of the abdomen
- Perform blood cultures with elevated temperature

**Additional assessment includes monitoring from presence of complications**
- Monitor for complications of Septic shock and DIC; tachycardia, tachypnea, decreased urine output, prolonged bleeding times

**DO**
- Perform nursing actions that minimize Perforation/peritonitis
  - Keep client NPO
  - Apply nasal cannula O2 therapy if comorbidity is present
  - Initiate IV access and aggressive IV fluid resuscitation and electrolyte replacement
  - Insert NG tube for initial decompression (the gastroenterologist may insert intestinal tubes if required)
  - Administer analgesia judiciously and antiemetic as ordered and monitor effect
  - Provide prescribed broad spectrum antibiotics initially then prepare to change to antibiotics according to culture reports
  - Expect surgical consult and prepare client for OR if necessary. Ostomy placement may be necessary.
  - If client has IBD or following radiation therapy, prepare to administer anti-inflammatory therapy
  - If abscess is present, prepare for CT guided drainage

**CALL**
- Monitor for refractory pain, hypotension, tachycardia, tachypnea and failure to respond to antibiotic therapy

If present, Initiate ABCs, shock management and call ready response team and MD

**OUTCOMES/BENCHMARKS:**
- Abdomen soft and non tender, no peritoneal signs
- Afebrile
- RR 12-20, HR: 60-100, SBP: 100-140, Pulse ox > 90-95%
- Normal bowel pattern