Inflammatory Bowel Disease

Lemone and Burke Chapter 26

Objectives:
- Discuss etiology, patho and clinical manifestations of
  - Appendicitis
  - Peritonitis
  - Ulcerative Colitis
  - Crohn’s Disease
  - Diverticular Disease
- Identify diagnostic tools
- Discuss collaborative care
- Identify nursing diagnosis

Appendicitis
- Acute inflammation of vermiform appendix
- Most common emergency abdominal surgery
- Can occur at any age – most common in adolescents and young adults
- Males slightly more prone than females
Appendicitis - patho

- Function of appendix is not fully understood
- Obstruction likely cause
- Distention
- Pain – McBurney’s Point
- Complication – tissue necrosis and gangrene

Appendicitis – Manifestation

- Pain
- Palpation – rebound tenderness
- Nausea and vomiting
- Complications
  - Perforation and peritonitis
  - Temperature normal or slightly up
- Dx – pelvic exam
- abdominal US
- CBC
- UA

Appendicitis - Manifestation

- Artery
- Cecum
- Gangrenous tip
Appendicitis – Collaborative Management

- H & P
- Nonsurgical
  - NPO
  - IV fluids
  - Antibiotics
  - Semifowler position
  - Analgesic
  - No heat
  - No enemas
- Surgical
  - Laparoscopic appendectomy
  - Laparotomy

Appendicitis – Nursing Diagnosis

- Acute pain
  - Assess
  - Administer pain med
  - Assess response
- Risk for infection
  - Perforation most likely pre-operative complication
  - Post op – wound infection, abscess, peritonitis

Peritonitis - Pathophysiology

- Acute inflammation of visceral/parietal peritoneum and endothelial lining of abdominal cavity, or peritoneum
- Causes – many –
  - i.e. perforations from PUD, cholecystitis, diverticulitis
- Inflammatory and immune response – works for small invasion
- Overwhelming infection – third spacing
- Septicemia
Peritonitis

- **Manifestation**
  - Pain
  - Rebound tenderness
  - Decreased bowel sounds
  - N/V
  - Rigid abdomen
  - Distension
  - Fever
  - Tachycardia
  - Tachypnea
  - Restlessness, confusion
  - Oliguria

- **Diagnosis**
  - Abdominal x-ray
  - CBC
  - LFT and renal function
  - Electrolytes
  - ABG
  - Blood cultures
  - Paracentesis

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Peritonitis – Collaborative Management

- NPO and TPN
- IV fluids
- IV antibiotics
- NG tube
- O2
- Morphine for pain control
- Surgical consult
  - Identify and repair cause of peritonitis
  - Control contamination
  - Remove foreign object and drain fluids

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Peritonitis – Nursing Diagnosis

- Acute pain
- Deficient fluid volume
- Ineffective protection
- Anxiety
- Risk for infection
Chronic Inflammatory Bowel Disease (IBD)

- Ulcerative colitis and Crohn’s disease
- Closely related
- Etiology unknown
- US and northern Europe
- Genetic component
- Peak incidence adolescents and young adults (15-35 years)

Ulcerative Colitis - Patho

- Chronic inflammatory disorder – affects mucosa of colon and rectum
- Onset insidious
- Females more often affected
- Inflammation leads to abscess
- Chronic inflammation leads to atrophy, narrowing and shortening of colon

Ulcerative Colitis - Manifestation

- Diarrhea
- Cramping
- Temperature
- Decreased H/H
- Electrolyte imbalance
- ESR increased

Complications

- Hemorrhage
- Colon perforation
- Toxic mega-colon
- Increases risk of colon cancer
Crohn’s Disease

- Idiopathic inflammatory disease that can affect entire intestinal tract (most common = terminal ileum or ascending colon)
- Bowel fistulas (common occurrence, may cause severe malnutrition)
- Malabsorption of vitamins and nutrients
- Flare-ups and remission – re-occurrence can happen other places of intestines

Complications

- Strictures
- Intestinal obstruction
- Fistula
- Perforation
- Colon CA

Manifestation

- Diarrhea
- Abdominal pain
- Fever
- Fatigue
- Weight loss
- Weakness
- Anemia
- N/V

IBD - Diagnosis

- Colonoscopy
- X-ray UBI or LGI
- Stool exam
- CBC
- Serum albumin
- LFT
- Electrolytes
IBD – Collaborative Management

- Medication
  - Sulfasalazine
  - Mesalamine
  - Corticosteroids
  - Immuno-depressants
- Nutrition
- Surgery
  - Colectomy
  - Ostomy

IBD - Surgeries

- Surgery last resort
- Bowel obstruction
- Depends on affected area

IBD – Surgery - Ileoanal Reservoir

- Step 1
- Step 2
IBD – surgery - Ileostomy

IBD – Nursing care
- H & P
- Teaching
- Pre-op care
- Post-op care
  - Assess surgical site and stoma
  - NGT
  - IVF
  - Ambulate
  - TCDB + 1/S
  - Monitor bowel sounds

ICD – Nursing Diagnosis
- Fluid volume deficit r/t diarrhea
- Acute pain
- Disturbed body image
- Imbalanced nutrition < body requirement
- Knowledge deficit
Diverticular Disease

- Diverticulosis
- Diverticulitis

Pathophysiology

- Sac-like out-pouchings (diverticula) occur at weak points in intestinal wall
- Undigested food or bacteria become trapped in diverticulum - inflammation and bleeding (diverticulitis)
- Most common site is sigmoid colon
- Affects 1/3 of adults over 60 years of age
Etiology/Incidence/Prevalence

- Low fiber diets
- Retained undigested food in diverticula, which compromises blood supply and facilitates bacterial invasion of the sac
- Affects 1/3 of adults over 60
- More men than women affected
- Only one in five people displays symptoms

Clinical Manifestations

- **Diverticulosis**
  - Usually asymptomatic
  - Often found incidentally in a routine colonoscopy

- **Diverticulitis**
  - Abdominal pain LLQ
  - Intermittent to steady
  - Peritonitis = fever, chills, tachycardia, N/V
  - Guarding, rebound tenderness
  - Rectal bleeding, constipation or diarrhea

Diverticulitis - Diagnosis

- CBC
- WBC will be elevated
- Decreased H/H if bleeding present
- Stool test
  - May be positive for occult blood
- Barium contrast
  - Shows diverticula
- Upper GI series
  - Shows diverticula of the small intestine
- Flat plate of the abdomen
  - Shows free air and fluid in LLQ=perforation from abscess
- Sigmoidoscopy/colonoscopy
  - Can see walls of intestine
Diverticulitis – Nonsurgical Management

- Drug therapy
  - ABX - Flagyl, Bactrim, Zosyn,
  - Anticholinergics –
  - Analgesics - Talwin
- Rest
- IVF to correct dehydration
- NPO if hospitalized – NGT
- Teaching
  - High fiber diet

(Continued)

Diverticulitis - Surgical Intervention

- Colon resection
- Patient selection based on
  - Rupture of diverticulum and peritonitis
  - Pelvic abscess
  - Bowel obstruction
  - Fistula
  - Persistent fever or pain after 4 days of treatment
  - Hemorrhage

Diverticulitis – surgical care

- Pre-op
  - Might be performed as an emergency
  - If not in acute stage, bowel prep may be given
  - If in acute stage, bowel prep is withheld
  - Pre-operative teaching may include information about the possible need for a colostomy

- Post-op
  - Drain for 2-3 days
  - Monitor stoma for color and integrity
  - NPO status with NG tube in place for 2-3 days
  - When peristalsis returns introduce clear liquids slowly and slowly advanced
Diverticulitis – Nursing Diagnosis

- Acute pain
- Impaired tissue integrity
- Imbalanced nutrition < body requirement
- Anxiety
- Disturbed body image
- Knowledge deficit

NCLEX

A client with diverticular disease undergoes a colonoscopy. When conducting an abdominal assessment, the nurse looks for which of the following as a sign of possible complication of the procedure?

- A. Diarrhea
- B. N + V
- C. Guarding and rebound tenderness
- D. Redness and warmth of the abdominal skin

NCLEX

A small bowel obstruction can occur due to:

- A. Eating extra fiber in the diet
- B. Abdominal adhesions
- C. Drinking too much water
- D. A NGT