“My stomach’s upset”
“I feel constipated”
“That new medication is giving me a bellyache”

Unit XVIII
Gastrointestinal System

History and Interview

Digestive System Functions
Anterior & Posterior Abdomen

Anterior Abdomen
Divided by Quads

Posterior Abdomen

History and Interview

Objective: Differentiate between findings that are within normal limits and those that represent an alteration in the GI system.

- Dietary intake
- Weight
- Bowel routines
- Pain
- GI symptoms
- Medications used
- Emotional distress
- Previous surgery
- Food allergies
- Family history, i.e., colon Ca

Examination of the Abdomen

- Inspection
- Auscultation
- Palpation
- Special Tests
Inspection

• Inspection is the first step
• Inspect
  – Skin
  – Umbilicus
  – Contour and Symmetry
  – Enlarged Organs or Masses
  – Movements or Pulsations
• Record

Auscultation

• Before palpation
  – Sounds may change after manipulation
• Record bowel sounds as being present, increased, decreased, or absent

Auscultation

• Bowel motility
  – Peristalsis
• Vascular Sounds
  – Bruits
Auscultation of an Infant

- Use diaphragm of the stethoscope
- Bowel Sounds

Palpation

- Begin with light palpation (helpful to put a pillow under the knees to relax the abdominal muscles & arms at side)
- Look for areas of tenderness & palpate last (guarding)
- Most sensitive indicator of tenderness is the client's facial expression
- Voluntary or involuntary guarding may also be present

Palpation of the Aorta
(not required)

- Palpable on most individuals
- Feel it pulsating with deep palpation of the central abdomen
- An enlarged aorta may be a sign of an aortic aneurysm
Palpation continued….

- It is more difficult to palpate clients that have a very muscular or an obese abdomen.

Recording: Abdomen

- **Normal findings include:**
  - Abdomen rounded & symmetrical with a centrally placed umbilicus
  - No lesions, rashes, discolorations, scars, inflammation, or visible peristalsis
  - Bowel sounds auscultated in all 4 quads
  - Abdomen relaxed & without tenderness or masses

Things to Remember

- Disorders in the chest will often manifest with abdominal symptoms. It is always wise to examine the chest (CV system) when evaluating an abdominal complaint.
Normal Characteristics of Feces

- Color
- Odor
- Consistency
- Shape
  - Age & environment are Influencing factors

Diagnostic Testing

- Guaiac or Hemoccult test
  - Detection of occult blood in stool
- X ray studies-
  - Plain film of abd
  - Upper GI/Barium swallow
    - Allows visualization of the esophagus, stomach, and duodenum
    - Inspects for tumors, vascular changes, mucosal inflammation, ulcers, hemias, and obstructions
  - Barium enema
    - Indirect view of lower colon to reveal tumors, polyps, and diverticula

Diagnostic Tests continued

- Ultrasound
- Colonoscopy
- Flexible Sigmoidoscopy
- Computerized Tomography Scan (CT)
- Magnetic Resonance Imaging (MRI)
- Enteroclysis
Common Alterations
Objective #4 Describe some common alterations in the GI system.

• Constipation
• Fecal impaction
• Diarrhea
• Fecal incontinence
• Flatulence
• Anorexia
• N & V
• Stool: blood, clay colored, black

continued

• Fecal Impaction
  – Hardened, puttylike feces in rectum
    • Due to prolonged retention
• Diarrhea
  – Liquid feces & increased frequency of defecation
• Bowel Incontinence
  – Loss of ability to control discharges
• Flatulence
  – Presence of excessive flatus in the intestines

Factors that Influence Elimination
Objective #7 Explain those factors that influence elimination

• Diet
• Stress
• Physical activity
• Fluid intake
• Disease
• Medication
• Habits
• Age
• Surgery
• Pain
Common Alterations cont..

• Constipation
  – Fewer than 3 BM per week
  – Symptoms-small dry hard stool
    • Or no stool

Nursing Diagnoses

Objective #5 Formulate some nursing diagnoses based on assessment.
Objective #6 Develop/use a NCP based on ND that is directed toward health promotion of GI system.

• Bowel incontinence
• Constipation
• Diarrhea
• Impaired skin integrity, high risk

Outcome Criteria

• Continence
• BM q 2-3 day
• No skin breakdown
• Vomiting relieved
• Decreased abdominal distention

NANDA Diagnosis Format

<table>
<thead>
<tr>
<th>DIAGNOSTIC STATEMENT</th>
<th>RELATED FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>Inadequate dietary fiber</td>
</tr>
<tr>
<td></td>
<td>Effects of medications</td>
</tr>
<tr>
<td></td>
<td>Inadequate fluid intake</td>
</tr>
<tr>
<td></td>
<td>Decreased activity</td>
</tr>
</tbody>
</table>
### Nursing Interventions

**Obj #8: Identify ways to promote normal elimination**

- Assess reason for problem
- Provide privacy
- Constipation
  - Contributing factors
  - Bowel care regimens
  - Manual removal of impaction
  - Bowel training

### Intervention continued...

**Continence**
- Identify functional level
- Plan for elimination

**Diarrhea**
- Mechanisms
- Food, Fluids

**Anorexia, N & V**

### Medications

**Objective #9: Describe the action, use, and nursing implications of the following classifications of drugs:**

- Laxatives/Cathartics
- Antidiarrheal Agents
- Enemas
- Stool softeners
- Antacids
- Antiemetics
Health promotion/pt.teaching

- Diet
  - Fruit
  - Vegetables
  - Fiber
  - Fluid intake
  - Regular schedule
  - Regular exercise
  - Respond to urge
  - Hazards of laxatives

Gastrointestinal Assessment

History: (circle and describe if present)
Positive family history of G.I. (gastrointestinal) disturbance, history of abdominal surgery, smoking, alcohol, high stress, anti-inflammatory medications, diabetes, colon cancer, special diet, food allergies, eating disorder, hemorrhoids, rectal pain, itching or bleeding, known or suspected exposure to parasites Describe:

Symptoms: (circle and describe if present)
Weight change, nausea, vomiting, or cramping after eating, abdominal pain after meals or at night, difficulty swallowing, belching, flatulence, epigastric burning, bloody emesis, tarry stools, diarrhea, or constipation. Describe:

Normal Bowel Habits:
Bowel routine Frequency Stool consistency Usual Color Describe any changes:
Gastrointestinal Assessment

Abdomen: Inspection (circle and describe any abnormalities)
- Concave, convex, round, protruding, symmetrical, distended, petechiae, spider angiomata, striae, scars, hernias, diastases recti, visible pulsation, pale, pink, jaundiced, shiny, hair.

Description and location of findings:

Abdomen: Auscultation (circle and describe any abnormalities)
- BS auscultated in all 4 quadrants? Y N Frequency of BS ___________min.
- Loud, soft, gurgling, high pitched, absent, diminished, peristaltic waves

Description and location of findings:

Abdomen: Palpation
- Tenderness, masses, bulges, rigid, taut/tense, soft

Description and location of findings:

Abdomen: Percussion:

Nursing Diagnosis (3 part):

Study Guide

- Recall normal objective findings of an abdominal examination.
- Decide techniques and sequencing employed to facilitate examination of the abdomen and strategies employed prior to beginning an assessment.
- Identify techniques for examination of a painful abdomen. Determine subjective and objective indicators of pain.

Study Guide

- Identify important characteristics to be noted about a client’s feces.
- Know the underlying purpose of the guiac test.