Chapter 31

Bowel Elimination
Defecation

- Defecation: the act of expelling feces from the body
- Peristalsis: rhythmic contractions of intestinal smooth muscle to facilitate defecation
- Gastrocolic reflex: increased peristaltic activity occurring during food consumption
- Valsalva maneuver: increasing abdominal muscle pressure to facilitate defecation
Question

• Is the following statement true or false?

For defecation to take place, all structures of the abdominal tract must function in a coordinated manner.
Answer

False.

For defecation to take place, all structures of the gastrointestinal tract, especially the components of the large intestine, must function in a coordinated manner.
## Common Factors Affecting Bowel Elimination

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of food consumed</td>
<td>Influence color, odor, volume, and consistency of stool, and fecal velocity</td>
</tr>
<tr>
<td>Fluid intake</td>
<td>Influences moisture content of stool</td>
</tr>
<tr>
<td>Drugs</td>
<td>Slow or speed motility</td>
</tr>
<tr>
<td>Emotions</td>
<td>Alter bowel motility</td>
</tr>
<tr>
<td>Neuromuscular function</td>
<td>Affects the ability to control rectal muscles</td>
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<tr>
<td>Abdominal muscle tone</td>
<td>Affects the ability to increase intra-abdominal pressure (Valsalva maneuver)</td>
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<tr>
<td>Opportunity for defecation</td>
<td>Inhibits or facilitates elimination</td>
</tr>
</tbody>
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Assessment of Bowel Elimination

- Elimination patterns
- Stool characteristics
# Characteristics of Stool

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>NORMAL</th>
<th>ABNORMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Brown</td>
<td>Black</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clay-colored (tan)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green</td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic</td>
<td>Foul</td>
</tr>
<tr>
<td>Consistency</td>
<td>Soft, formed</td>
<td>Soft, bulky</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard, dry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Watery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pastelike</td>
</tr>
<tr>
<td>Shape</td>
<td>Round, full</td>
<td>Unformed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pencil-shaped</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stonelike</td>
</tr>
<tr>
<td>Components</td>
<td>Undigested fiber</td>
<td>Worms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blood</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mucus</td>
</tr>
</tbody>
</table>
Testing Stool for Occult Blood

NURSING GUIDELINES

Testing Stool for Occult Blood

1. Collect stool within a toilet liner or bedpan. Use of such devices prevents mixing stool with water or urine.

2. Don gloves and use an applicator stick to collect the specimen. These measures reduce the transmission of microorganisms.

3. Take a sample from the center area of the stool. A sample from here provides more diagnostic value because it is not superficially tainted with blood from local tissue.

4. Apply a thin smear of stool onto the test area supplied with the screening kit. Correct use of kit ensures thorough contact with the chemical reagent.

5. Cover the entire test space. Doing so ensures more accurate findings.

6. Place two drops of chemical reagent onto the test space. This step promotes a chemical reaction.

7. Wait 60 seconds. This duration is the time needed for chemical interaction with the stool.

8. Observe for a blue color. This finding indicates that blood is present.
Common Alterations in Bowel Elimination

• Introduction

• Constipation
  – Primary
  – Secondary
  – Iatrogenic
Question

• Is the following statement true or false?

Constipation is higher among those whose dietary habits lack adequate fiber.
Answer

True.

Dietary fiber, which becomes undigested cellulose, is important because it attracts water within the bowel, resulting in bulkier stool that is more quickly and easily eliminated.
Common Alterations in Bowel Elimination (cont’d)

• Constipation (cont’d)
  – Pseudoconstipation
• Fecal impaction
• Flatulence
• Diarrhea
• Fecal incontinence
Removing Fecal Impaction

NURSING GUIDELINES

Removing a Fecal Impaction

1. Wash your hands or perform an alcohol-based handrub (see Chap. 10). Hand hygiene reduces the transmission of microorganisms.
2. Don clean examination gloves. Doing so complies with standard precautions by providing a barrier between the hands and a substance that contains body fluid.
3. Provide privacy. Privacy demonstrates respect for the client’s dignity.
4. Place the client in a Sims’ position (see Chap. 14). This position facilitates access to the rectum.
5. Cover the client with a drape and place a disposable pad under the client’s hips. Use of these materials prevents soiling.
6. Place a bedpan conveniently on the bed. The bedpan acts as a container for removed stool.
7. Don clean gloves. Use of gloves reduces the transmission of microorganisms.
8. Lubricate the forefinger of your dominant hand. Lubrication eases insertion within the rectum.
9. Insert your lubricated finger within the rectum to the level of the hardened mass. Insertion to this level facilitates digital manipulation of the stool.
10. Move your finger about slowly and carefully to break up the mass of stool. Movement facilitates removal or voluntary passage.
11. Withdraw segments of the stool (Fig. 31-2) and deposit them in the bedpan. Removal reduces the internal mass of stool.
12. Provide periods of rest but continue until the mass has been removed or sufficiently reduced. Doing so restores patency to the lower bowel.
13. Clean the client’s rectal area; dispose of the stool and soiled gloves; repeat hand hygiene measures. These measures support principles of medical asepsis.
Inserting a Rectal Tube

(Refer to Skill 31-1 in the textbook.)
Question

• Is the following statement true or false?

Incontinence can result from neurologic changes.
Answer

True.

Incontinence can result from neurologic changes that impair muscle activity, sensation, or thought processes.
Managing Fecal Incontinence

The nurse teaches the client and family as follows:

- Eat regularly and nutritiously.
- Monitor the pattern of incontinence to determine whether it occurs at a similar time each day.
- Sit on the toilet or bedside commode before the time elimination tends to occur.
- Consult the physician about inserting a suppository or administering an enema every 2 to 3 days to establish a pattern for bowel elimination.
- Use moisture-proof undergarments and absorbent pads to protect clothing and bed linen.
- Teach caregivers to do the following:
  - Do not imply, verbally or nonverbally, that the client is to blame for the incontinence or that cleaning him or her is disgusting.
  - Avoid anything that connotes diapering, to preserve the client’s dignity and self-esteem.
Measures to Promote Bowel Elimination

• Two physician-ordered interventions to promote elimination when not naturally occurring
  – Insert a rectal suppository
  – Administer an enema
    o Cleansing enemas
      ▪ Tap water, normal saline
      ▪ Soapsuds, hypertonic saline
Inserting a Rectal Suppository

(Refer to Skill 31-2 in the textbook.)
Administering a Cleansing Enema

(Refer to Skill 31-3 in the textbook.)
Administering a Hypertonic Enema Solution

**NURSING GUIDELINES**

**Administering a Hypertonic Enema Solution**

1. Warm the container of solution (if it is cold) by placing it in a basin or sink of warm water. **Warmth promotes comfort.**

2. Assist the client to a Sims’ position or use a knee-chest position (see Chap. 14). **These positions promote gravity distribution of the solution.**

3. Wash hands or use an alcohol-based handrub (see Chap. 10) and don gloves. **Hand hygiene reduces transmission of microorganisms; gloves provide a barrier from contact with a substance that contains body fluid.**

4. Remove the cover from the lubricated tip. **This step facilitates administration.**

5. Cover the tip with additional lubricant. **Lubricant eases insertion.**

6. Invert the container. **Inversion causes air in the container to rise toward the upper end.**

7. Insert the full length of the tip within the rectum. **This positioning places the tip at a level that promotes effectiveness.**

8. Apply gentle, steady pressure on the solution container for 1 to 2 minutes or until the solution has been completely administered. **This method instills a steady stream of solution.**

9. Compress the container as the solution instills. **Compression provides positive pressure rather than gravity to instill fluid.**

10. Encourage the client to retain the solution for 5 to 15 minutes. **This duration promotes effectiveness.**

11. Clean the client and position for comfort. **These measures demonstrate concern for the client’s well-being.**

12. Discard the container, remove gloves, and perform hand hygiene measures. **Doing so follows principles of medical asepsis.**
Measures to Promote Bowel Elimination (cont’d)

• Administer an enema (cont’d)
  – Retention enemas
    o Oil retention enema
      ▪ Mineral, cottonseed, or olive oil
      ▪ Retained at least 30 minutes
      ▪ Lubricate and soften stool to ease stool expulsion
Ostomy Care

- **Ileostomy:** surgically created opening to the ileum
- **Colostomy:** surgically created opening to the colon
- **Providing peristomal care**
  - Applying an ostomy appliance
  - Draining a continent ileostomy
- **Irrigating a colostomy**
Question

• Which type of constipation occurs as a consequence of other medical treatment?
  a. Iatrogenic constipation
  b. Secondary constipation
  c. Pseudoconstipation
  d. Primary constipation
Answer

a. Iatrogenic constipation

Prolonged use of narcotic analgesia for example, tends to cause constipation. These and other drugs slow peristalsis, delaying transit time. The longer the stool remains in the colon, the drier it becomes, making it more difficult to pass.
An Ostomy Appliance
Changing an Ostomy Appliance

(Refer to Skill 31-4 in the textbook.)
# Draining a Continent Ileostomy

Draining a Continent Ileostomy

The nurse teaches the client or family as follows:

- Assume a sitting position.
- Insert a lubricated 22 to 28 F catheter into the stoma.
- Expect resistance after inserting the tube approximately 2 inches; this is the location of the valve that controls the retention of liquid stool or urine.
- Gently advance the catheter through the valve at the end of exhalation, while coughing, or while bearing down as if to pass stool.
- Lower the external end of the catheter at least 12 inches below the stoma.
- Direct the end of the catheter into a container or toilet as stool or urine begins to flow.
- Allow at least 5 to 10 minutes for complete emptying.
- Remove the catheter and clean it with warm soapy water.
- Place the clean catheter in a sealable plastic bag until its next use.
- Cover the stoma with a gauze square or a large bandage.
- If the catheter becomes plugged with stool or mucus:
  - Bear down as if to have a bowel movement.
  - Rotate the catheter tip inside the stoma.
  - Milk the catheter.
  - If these are not successful, remove the catheter, rinse it, and try again.
  - Notify the physician if these efforts do not result in drainage.
  - Never wait longer than 6 hours without obtaining drainage.
Irrigating a Colostomy

(Refer to Skill 31-5 in the textbook.)
Nursing Implications

- Potential nursing diagnoses:
  - Constipation, risk for constipation, perceived constipation
  - Diarrhea, bowel incontinence
  - Toileting self-care deficit
  - Situational low self-esteem
General Gerontologic Considerations

- Age-related changes predispose older adults to constipation, as do medication effects, diminished physical activity, and inadequate fluid and fiber intake.

- Older adults likely to implement home remedies to promote bowel elimination.

- Educate older adults about risk for constipation and effective bowel regimen.
General Gerontologic Considerations (cont’d)

- Some older adults overuse laxatives or have long-standing habit of laxative abuse; encourage use of bulk-forming products to promote effective bowel elimination

- Prolonged use of mineral oil to prevent/relieve constipation interferes with absorption of fat-soluble vitamins (A, D, E, and K)
General Gerontologic Considerations (cont’d)

- Change in bowel habits and stool characteristics can signal colorectal cancer; recommend regular endoscopic bowel exams after 50 years of age.
- Diarrhea can quickly lead to dehydration and electrolyte imbalance.
- Hemorrhoids or polyps in older adults may interfere with stool passage; gently perform digital removal of impaction, if ordered.