Health-Process-Evidence-based Clinical Practice Guidelines for Intestinal Obstruction

Nolan O. Aludino, MD
Intestinal Obstruction

A. Overview of the Problem
   – Concept
   – Common Types
   – Common Causes

B. General Management Guidelines
   – Clinical Diagnosis
   – Paraclinical Diagnosis
   – Treatment
Clinical Questions

1. What is a operational concept of intestinal obstruction?

Definition

- problem of the intestinal contents to pass through normally
- (Problem, motility, inability difficulty, failure)
- Intestinal obstruction- small int and large int (starting from the duodenum)
Clinical Questions

2a. How is intestinal obstruction classified in terms of degree of obstruction?

• Partial
• Complete
Clinical Questions

2b. How is intestinal obstruction classified in terms of its cause?

- Mechanical
- Non mechanical
3a. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a mechanical intestinal obstruction?

- Presence of the cardinal signs and symptoms of intestinal obstruction plus Palpable abdominal mass and/or high-pitched bowel sound
- Presence of the cardinal signs and symptoms of intestinal obstruction plus high-pitched bowel sound
Clinical Questions

3b. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a non-mechanical intestinal obstruction?

- Absence of signs and symptoms for mechanical obstruction plus absent bowel sounds plus a rectal examination of distended rectal vault
Clinical Questions

4a. How is intestinal obstruction classified in terms of “vascular compromise”?

- Strangulated
- Non strangulated
4b. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a strangulated intestinal obstruction?

- “Hemodynamic instability”
- Peritoneal signs
Clinical Questions

4c. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a non-strangulated intestinal obstruction?

• Absence of signs and symptoms of strangulation
Clinical Questions

5. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has intestinal obstruction?

- Abdominal pain
- Vomiting
- Obstipation
- Abdominal distention
5a. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has partial intestinal obstruction?

- Abdominal Distention
- Presence of flatus
- Presence of bowel movement
Clinical Questions

5b. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has complete intestinal obstruction?

- Presence of the cardinal signs of intestinal obstruction plus a collapsed rectal vault
4. How is intestinal obstruction classified in terms of its location?

- Small bowel obstruction
  - Proximal or distal
- Large bowel obstruction
Clinical Questions

4a. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a proximal small bowel obstruction?

- Bilious vomiting
- Shorter onset
Clinical Questions

4b. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has a distal small bowel obstruction?

- Abdominal distention
- Fecaloid vomitus
- Longer onset
4b. What are reliable signs and symptoms (more than 90% certainty) that will indicate that a patient has large bowel obstruction?

- Abdominal distention
- Fecaloid vomitus
- Longer onset
5. What are the more common causes of Mechanical Intestinal Obstruction?

- Post Operative Adhesions
- Hernias
- Tumors
- Intussusception
- Fecal impaction
Clinical Questions

5. What are the more common causes of Non-mechanical Intestinal Obstruction?

• Post-operative ileus
• Peritonitis
• Metabolic disturbances
• Medications
Intestinal Obstruction

General Management Guidelines

• Clinical Diagnosis
• Paraclinical Diagnosis
• Staging and Prognostication
• Treatment
I. Clinical Diagnosis

Intestinal Obstruction

Proximal

Distal

Small Intestines

Large Intestines
II. Clinical Diagnosis

Intestinal Obstruction

- Mechanical
  - Partial
  - Complete

- Non-Mechanical
  - Partial
  - Complete
Intestinal Obstruction
General Management Guidelines

III. Clinical Diagnosis

Mechanical Obstruction

Partial
- Post Operative Adhesions
- Hernias
- Tumors
- Intussusception
- Fecal impaction

Complete
- Post Operative Adhesions
- Hernias
- Tumors
- Intussusception
- Fecal impaction
6. If a paraclinical diagnostic procedure is needed in a patient with intestinal obstruction, what is the most cost-effective procedure to do?

<table>
<thead>
<tr>
<th>Options</th>
<th>Benefit</th>
<th>Risk</th>
<th>Cost</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Abdominal Film</td>
<td>++ Sen: 75% Spec: 53%</td>
<td>Radiation exposure</td>
<td>(+)</td>
<td>available</td>
</tr>
<tr>
<td>CT-Scan</td>
<td>++ Sen: 90% Spec: 90%</td>
<td>Radiation exposure</td>
<td>(+++)</td>
<td>available</td>
</tr>
</tbody>
</table>
Clinical Questions

7. What is the most cost-effective treatment for partial intestinal obstruction?

- Conservative Management
  - Non surgical decompression
  - Adequate hydration
Clinical Questions

8. What is the most cost-effective treatment for complete intestinal obstruction?

• Surgery
  – Relieve source of obstruction
  – Restore bowel continuity