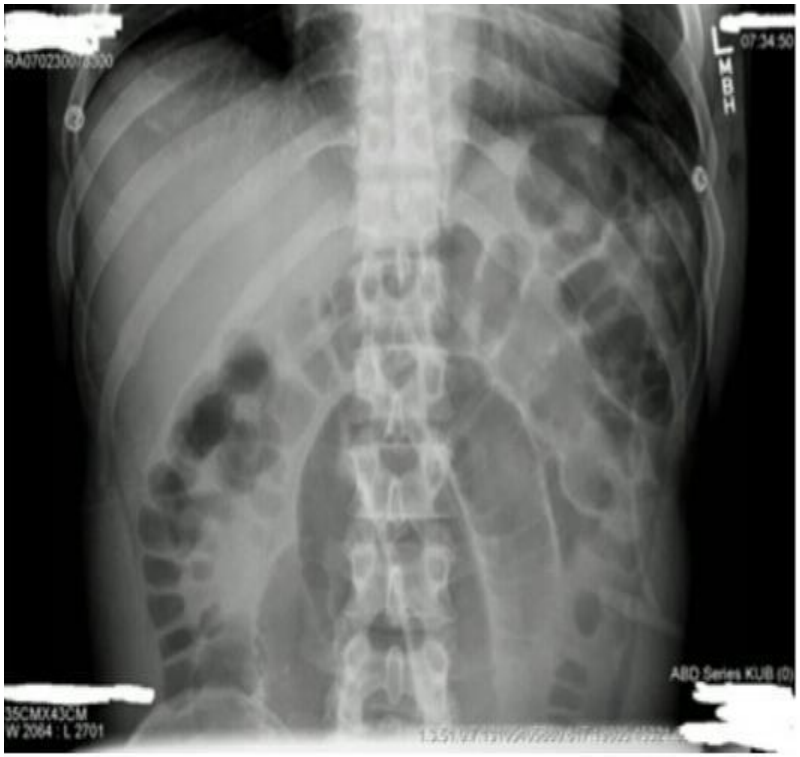
Intestinal obstruction



Causes

Dynamic

1. Intraluminal – Foreign body, Gall stones.
2. Intramural – strictures, tumors.
3. Extra mural – adhesions

Adynamic

1. Paralytic ileus.
2. Mesenteric vascular occlusion.
3. Pseudo obstruction.

Clinical features

- Classic quartet,

1. Pain
2. Distention
3. Vomiting
4. Absolute constipation

Clinical features

- High small bowel obstruction,

1. Vomiting – early , profuse , bilious. Rapid dehydration.
2. Pain – Moderate.
3. Distention – Minimal
4. Defecation – May be normal until last stage.

Clinical features

- Low small bowel obstruction,

1. Pain- Predominant, colicky in nature.
2. Vomiting – delayed
3. Central distension.

Clinical features

- Large bowel obstruction.

1. Distention – Early and pronounced.
2. Absolute constipation
3. Pain – mild
4. Vomiting – late feature.

Types of obstruction

1. Acute – in small bowel obstruction
2. Chronic – in large bowel obstruction.
3. Acute on chronic
4. Sub acute – incomplete obstruction.

Investigations

1. Supine abdominal X ray,

Small intestine,

1. Straight segment
2. Centrally Located
3. Lie transversely
4. No gas in the colon.

Large intestine,

1. Bowel in the periphery
2. Haustral folds

Investigation

- Jejunum,

Valvulae conniventes

- Ileum – feature less
- Caecum – Round gas shadow in the RIF.
- Lateral X ray of abdomen is not useful in intestinal obstruction.

Investigations

- Erect abdominal X ray,

(Step ladder pattern is there)

- Abdominal USS
- CT scan
- Erect CXR
- Sigmoidoscopy

Treatment

- Keep nil by mouth.
- GI drainage – NG tube.
- Fluid and electrolyte replacement (Hartmann's solution and Normal saline)
- Urinary catheter.
- Input/ Output chart, target urine 0.5ml/kg/hr.

Treatment

- IV antibiotics
- Exploratory laporatomy – for peritonitis and closed loop obstruction.
- Conservative management if adhesions- can wait for upto 72 hrs if there is no features of peritonitis.

Treatment

- Non strangulated obstruction can be treated expectantly.
- Large bowel obstruction is mainly due to malignancy. And more in left side than right side.

Severity Types

- Obstruction can be ,

1. Simple – Blood supply to the content is intact.
2. Strangulation - Here interference to the blood flow. Viability of the bowel is threatened due to poor blood supply.

Strangulation

- Initially the venous return is comprised before the arterial supply.
- When arterial supply is impaired , haemorrhagic infarction leads to translocation of anaerobic organisms with with their toxins.

Features

- Clinical features of strangulation.

1. Constant pain (Peritonitis)
2. Tenderness with rigidity.
3. Shock.

- Leukocytosis in FBC.

Adynamic

Causes ,

1. Post operative
2. Infective – Appendicitis
3. Uraemia
4. Hypokalemia
5. Gastroenteritis.
6. Spinal injury.

Clinical features

1. Constipation
2. No bowel sounds
3. Marked abdominal distension
4. Vomiting
5. Tachycardia

Pain is not a feature here.

Investigation

- Supine abdominal X ray,

Gaseous distention uniformly distributed.

Treatment

- Treat as intestinal obstruction
- Nasogastric aspiration
- Treat the underlying cause
- Use rectal tubes in some cases.