

Ogilvie's syndrome (Acute colonic pseudobstruction)

Acute colonic pseudobstruction (Ogilvie syndrome) is a syndrome of massive dilatation of the colon without mechanical obstruction that develops in hospitalized patient with serious underlying medical or surgical conditions & especially postoperatively but not necessarily laparotomy.

Pathophysiology of the disease is thought to involve early motor disturbance followed by complete cessation of peristalsis & entrapment of large amount of gas in the proximal transverse colon.

Causes

- Metabolic
Dm, hypokalemia, uremia, myxoedema
- Severe trauma especially lumbar spine and pelvis.
- Shock; burn, myocardial infarction, stroke.
- Septicemia
- Retroperitoneal irritation by urine, blood, enzymes (pancreatitis) & tumour.
- Drugs as laxatives, tricyclic antidepressant, phenothiazines.
- Secondary gastrointestinal involvement by scleroderma or Chagas disease.

Clinical features

Acutely ill patient usually with septicemia or electrolyte derangement develop features of intestinal obstruction.

Markedly distended abdomen, abdominal pain, nausea & vomiting.

Investigations

Water soluble contrast enema should be performed to rule out an acute distal mechanical obstruction and can be therapeutic if the cause is simply postoperative constipation.

Plain abdominal X-ray (before contrast enema) shows markedly distended colon. Look for the cecal diameter. If the cecal diameter is 9 cm and more, the patient needs close observation.

If the cecal diameter is 12 cm and more, it has risk of perforation & so submit the patient for intervention.

Treatment

It depends on the cecal diameter on plain X-ray, presence or absence of signs of peritonitis due to perforation.

- If there is no signs of perforation and the cecal diameter is 9 cm ⇒ close observation. Correct any fluid and electrolyte imbalance; stop taking sedatives (narcotics), nothing by mouth, nasogastric decompression and serial abdominal films.

Many patients will improve by applying the above measures.

If they don't improve within 24 – 48 hrs or if their cecal diameter increases to 12 cm or greater, then shift to nonsurgical intervention.

There are two approaches of nonsurgical intervention if the conservative management fails:

- 1) Colonoscopic decompression. 2) Pharmacological using neostigmin.
- Colonoscopic decompression with great care and minimal insufflations & the endoscope should pass to at least the hepatic flexure for adequate decompression of the cecum.

Colonoscopy is highly effective but the recurrence rate is up to 15%.

- The second approach is pharmacological. Neostigmine is powerful parasympathetic agonist, can produce rapid & dramatic return of colonic motility. The results begin from 30 seconds to 10 minutes following administration.

Side effects include severe bradycardia, so cardiac monitoring & atropine should be available stand by.

- **Surgical intervention** usually subtotal colectomy with ileorectal anastomosis is reserved for:

- 1) Patient who fail to respond to less invasive treatment or
- 2) Progression to ischemic necrosis & perforation has occurred.

The following are associated with increased risk of perforation in Ogilvie syndrome:

- 1) Increase age.
- 2) Increase cecal diameter.
- 3) Delay in decompression.
- 4) Status of the bowel as chronic ischemia.