

Acute Colonic Pseudo-Obstruction - Full Clinical Guideline

Reference no.: CG-GASTRO/2023/010

Aim

To provide guidance on the diagnosis and treatment of colonic pseudo-obstruction.

Keywords

Colon, colonic, pseudo-obstruction, neostigmine

Background

Acute colonic pseudo-obstruction is diagnosed by the identification of massive colonic dilation without any mechanical obstruction. Other conditions which can present in a similar manner include sigmoid volvulus, constipation, acute ischaemia, diverticulitis, functional abdominal pain. Acute pseudo-obstruction often occurs in chronic neurological conditions and may also be triggered by

- Drugs,
- Surgery,
- Hypothyroidism
- Metabolic disturbances/ Electrolyte derangements
- Sepsis.

It may be complicated by ischaemia and perforation in up to 15% of patients. The risk of perforation is related to colonic diameter >10cm (caecum) and prolonged distention.

Diagnosis

Investigations

- Plain AXR as initial investigation, followed by CT abdomen to confirm diagnosis and exclude other conditions in differential diagnosis.
- Drug history
- Blood test (U+E, Magnesium, phosphate, TFTs, CRP, lactate).
- Blood cultures.
- Screen for sepsis CXR, urine culture

Treatment guidelines

- 1. Conservative management
 - a. Treat the underlying condition
 - b. Nil by Mouth
 - c. NG suction

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- d. Stop offending drugs
- e. Correct metabolic derangements. Usually with IV fluids/electrolytes
- f. Use prokinetics if nauseous e.g. metoclopramide/domperidone (short term use only)
- g. Mobilise
- h. Treat any sepsis with empirical antibiotics –see trust guidelines
- i. Flatus tube (inserted by trained staff members only) and nurse in prone left and right lateral positions if possible to promote passage of flatus.
- 2. If conservative treatments fail, consider colonoscopic decompression +/- neostigmine immediately post procedure. The decompressed bowel wall will have a much better ability to withstand pressure with much reduced wall tensions
- 3. Failed response after 48 hours consider anticholinesterase parasympathomimetic agent, either oral pyridostigmine, or IV Neostigmine
 - a. Parasympathetic stimulation can also induce bradycardia, asystole, hypotension, restlessness, seizures, tremor, miosis, bronchoconstriction, hyperperistalsis, nausea, vomiting, salivation, diarrhea, and sweating. Contraindications to use of neostigmine include known hypersensitivity and mechanical urinary or intestinal obstruction. Recent myocardial infarction, acidosis, asthma, bradycardia, peptic ulcer disease, and therapy with betablockers are relative contraindications"
 - b. IV Neostigmine Dose 2.0 mg of neostigmine intravenously STAT can be repeated after 5 minutes if required
 - c. Monitoring, close ECG and BP monitoring.
 - d. Ensure atropine available at time of administration in case urgent reversal required (e.g, severe bradycardia)
 - e. Oral Pyridostigmine 60mg BD increasing to QDS if required

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References

Ponec RJ, Saunders MD, Kimmey MB. Neostigmine for the treatment of acute colonic pseudo-obstruction N Engl J Med. 1999 Jul 15;341(3):137-41.

Spira IA, Wolff WI. Gangrene and spontaneous perforation of the cecum as a complication of pseudo-obstruction of the colon: report of three cases and speculation as to etiology. *Dis Colon Rectum.* 1976 Sep. 19(6):557-62. [Medline].

Dorudi S, Berry AR, Kettlewell MG. Acute colonic pseudo-obstruction. *Br J Surg.* 1992 Feb. 79(2):99-103. [Medline].

Vanek VW, Al-Salti M. Acute pseudo-obstruction of the colon (Ogilvie's syndrome). An analysis of 400 cases. *Dis Colon Rectum*. 1986 Mar. 29(3):203-10. [Medline].

Fausel CS, Goff JS. Nonoperative management of acute idiopathic colonic pseudo-obstruction (Ogilvie's syndrome). West J Med. 1985 Jul. 143(1):50-4. [Medline]. [Full Text].

Marinella MA. Acute colonic pseudo-obstruction complicated by cecal perforation in a patient with Parkinson's disease. *South Med J.* 1997 Oct. 90(10):1023-6. [Medline].

Acute colonic pseudo-obstruction. ASGE guideline http://www.guideline.gov/summary/summary.aspx?doc_id=5686&nbr=3824

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