

**DIAGNOSIS & MANAGEMENT OF INTESTINAL PSEUDO-OBSTUCTION**

Michael A Kamm
Professor of Gastroenterology, St Mark’s Hospital, UK

**ACUTE PSEUDO-OBSTUCTION (GILVIE’S SYNDROME)**

Patients who come into hospital with an acute illness, such as pneumonia, myocardial infarct, or fractured hip, can sometimes develop an acute massive dilatation of the colon. The condition can also occur after surgery. This condition can be serious, with abdominal distension and pain, and rarely perforation. This condition was originally treated by surgical decompression such as caecotomy, and more recently by colonoscopic decompression. This condition is due to an acute imbalance of the normal extrinsic autonomic innervation of the large bowel. Recent controlled data suggest that intra-venous or intra-muscular neostigmine is the treatment of choice, resulting in decompression and relief in a majority of patients.

The definitive controlled trial of neostigmine was conducted in a series of 21 patients with acute colonic pseudo-obstruction. All had abdominal distension and radiographic evidence of colonic dilatation, with a caecal diameter of at least 10 cm, and had no response to at least 24 hours of conservative treatment. Eleven received 2 mg of neostigmine intravenously and 10 received intravenous saline. A physician who was unaware of the patients’ treatment assignments recorded clinical response (defined as prompt evacuation of flatus or stool and a reduction of colonic distension; one eventually underwent subtotal colectomy). Side effects of neostigmine included abdominal pain, excess salivation, and vomiting. Symptomatic bradycardia developed in two patients and was treated with atropine. In patients with acute colonic pseudo-obstruction who have not had a response to conservative therapy, treatment with neostigmine rapidly decompresses the colon.

**CHRONIC IDIOPATHIC INTESTINAL PSEUDO-OBSTUCTION**

Most patients with functional gut symptoms such as vomiting, altered bowel habit and pain have a structurally normal non-dilated gut. In these patients gut nerves and muscle are normal, and the disturbance is thought to relate to reversible aspects of central and peripheral nerve function.

In contrast there is a small group of patients with chronic functional symptoms in whom the gut is dilated. These patients have a definable disorder of enteric nerve or muscle. The gut is dilated and associated with ineffective motility, but in the absence of a mechanical obstructing lesion. Although the condition is rare, most surgeons and gastroenterologists will encounter such patients in their professional career. Often these present with acute episodes - in the absence of a proper history and thinking of the diagnosis patients may come to surgery because of presumed obstruction, only to find dilated gut without a lesion. In this situation it is important for the surgeon to think of the diagnosis, and to take a full thickness biopsy from dilated gut.

In patients with no known predisposing cause, that is primary pseudo-obstruction, the condition is due to a primary myopathy or neuropathy. These myopathies and neuropathies may be degenerative or inflammatory in nature. In some patients the condition is secondary to some other systemic disorder, such as systemic sclerosis (scleroderma), amyloidosis, or as a non-metastatic effect of malignancy, most commonly small cell carcinoma of the lung. Occult malignancy should be sought in anyone presenting for the first time with a short history, in a consecutive unselected large series of patients with the primary form of this disorder, that is without a systemic cause, the clinical spectrum, underlying pathologies, response to treatments, and prognosis were examined. All patients had clinical and radiological features of intestinal obstruction in the absence of organic obstruction, associated with dilated small intestine (with or without dilated large intestine), being actively managed in one tertiary referral centre at one time. The radiological sign of greatest diagnostic value is that of a dilated duodenal loop. Twenty patients (11 men and nine women, median age 43 years, range 22-67) fulfilled the diagnostic criteria. Median age at onset of symptoms was 17 years (range two weeks to 59 years). Two patients had an autosomal recessive inheritance visceral myopathy. Major presenting symptoms were pain (80%), vomiting (75%), constipation (40%), and diarrhoea (20%).

Eighteen patients required abdominal surgery, and a further patient had a full thickness rectal biopsy. The mean time interval from symptom onset to first operation was 6 years. Histology showed visceral myopathy in 13, visceral neuropathy in three, and was indeterminate in three. In the one other patient small bowel motility studies were suggestive of neuropathy.

Two patients died within two years of symptom onset, one from generalised thrombosis and the other from an inflammatory myopathy. Of the remaining 18 patients, eight were nutritionally independent of supplements, two had gastrostomy or jejunostomy feeds, and eight were receiving home parenteral nutrition. Five patients were opioid dependent, only one patient had benefited from prokinetic drug therapy, and five patients required formal psychological intervention and support. It was concluded that in a referral setting visceral myopathy is the most common diagnosis in this heterogeneous syndrome, the course of the illness is usually prolonged, and prokinetic drug therapies are not usually helpful. Ongoing management problems include pain relief and nutritional support. There is a place for selective surgery in some of these patients, but this must be tailored to the individual patient.

**REFERENCES**


Mann SD, Debinski HS, Kamm MA. Clinical characteristics of chronic idiopathic intestinal pseudo-obstruction in adults. Gut 1997; 41:675-81
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