Colonic Pseudo-Obstruction

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Abstract: Acute colonic pseudo-obstruction (Ogilvie's syndrome) is a disorder characterized by gross dilatation of colon in the absence of an obstructing anatomic lesion. The precise etiology by which colonic dilation occurs is not fully understood. It generally develops in hospitalized patients and is associated with a wide variety of medical and surgical conditions. Most cases respond to conservative management. We describe a case of a 42 year old female with massive colonic dilation and no obstructing lesions. She developed respiratory failure due to severe abdominal distension. Overnight nasogastric decompression along with repletion of potassium led to complete resolution of abdominal distension and respiratory failure.

A 42-year-old female with developmental delay and self-abusive (self injury and self mutilating) behavior presented to the emergency room with increasing abdominal distention of four days duration. On physical examination the patient was afebrile but in severe respiratory distress requiring endotracheal intubation. The abdomen was severely distended and minimally diffusely tender. Significant laboratory findings were a white blood cell count of 14,000 per cubic millimeter and potassium of 3.3 mEq/l.

Abdominal radiographs revealed massively dilated loops of large bowel (Fig. **1**). A computed tomographic scan showed collapsed small bowel with abrupt transition to markedly dilated large bowel (Fig. **2**). A colonoscopy revealed collapsed sigmoid colon up to 50cm, at which point the bowel became massively dilated. No obstructing lesions were seen.

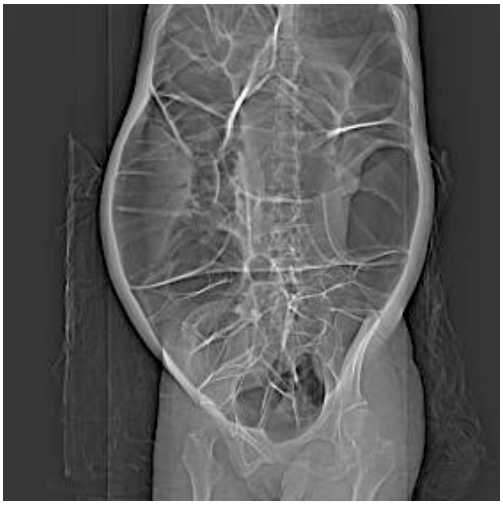

Fig. (1). Abdominal radiograph revealing massively dilated loops of large bowel.

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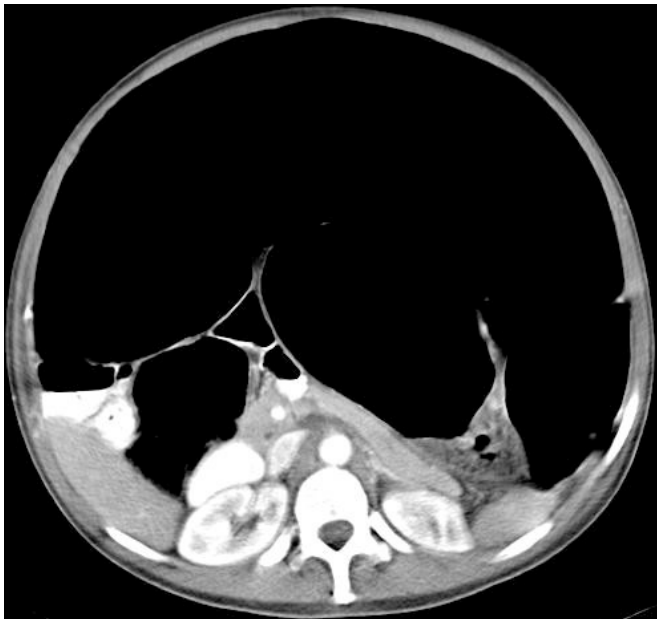

Fig. (2). CT scan showing collapsed small bowel with abrupt transition to markedly dilated large bowel.

This patient had an acute colonic pseudo-obstruction (also known as Ogilvie's syndrome) which is characterized by massive dilatation of the colon in the absence of any obstructive lesions [1]. It is more common in males and in those over 60 years of age, but the exact mechanism of colonic dilation is unknown. The clinical presentation includes abdominal distension, respiratory insufficiency, nausea, vomiting, abdominal pain, constipation, and possibly diarrhea. On examination the abdomen is tympanitic and bowels sounds are usually present. Peritoneal signs suggest impending perforation. Laboratory abnormalities include hypokalemia, hypomagnesemia, or hypocalcemia. Abdominal radiographs reveal a markedly dilated colon, which may involve the cecum to the splenic flexure, with possible extension to the rectum. CT scan confirms these findings and is very valuable in distinguishing between true anatomic obstruction and pseudo-obstruction. A colonoscopy is required

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to confirm the diagnosis and rule out mechanical obstruction or toxic megacolon.

Treatment consists of initial conservative therapy (nil by mouth, nasogastric decompression, gentle enemas, rectal tube and prone positioning), removal of potential precipitants (e.g., narcotics), pharmacologic agents (e.g., Neostigmine) [2], endoscopic decompression [3] and surgery. Mechanical decompression includes radiologic passage of decompression tubes under fluoroscopic guidance, colonoscopic decompression with or without placement of a decompression tube, and cecostomy by percutaneous, endoscopic, laparoscopic, and open surgical means. Surgery is reserved for patients who fail medical and endoscopic therapies and for those who are suspected of having peritonitis or perforation.

Overnight nasogastric decompression along with repletion of potassium resulted in complete resolution of our patient's abdominal distention. The patient was successfully extubated and tolerated a regular diet the following day.

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