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AN UNUSUAL PRESENTATION OF OGILVIE'S SYNDROME

General Surgery

Dr Mitali Vinodkumar Patil M.B.B.S, Smt. NHL Municipal Medical College

Dr Vamsi Lakshman Pappu Junior Resident, Dept of General Surgery, MGM Medical College and Hospital, Kamothe, Navi Mumbai - 410206

ABSTRACT

Introduction: Ogilvie's syndrome, also known as acute colonic pseudo-obstruction, refers to pathologic dilation of the colon without underlying mechanical obstruction, occurring primarily in patients with severe comorbidities. Acute colonic pseudo-obstruction appears to be more common in men and patients over the age of 60 years. The incidence is approximately 100 cases per 100,000 hospital admissions per year. **Aims And Objectives:** The study aims to discuss an unusual presentation of Ogilvie's syndrome

Objectives:

- Discuss the aetiologies and management of Ogilvie's syndrome

Methods: We will be discussing a case of Ogilvie's syndrome. **Results:** The differential diagnosis of large bowel obstruction. **Conclusion:** A large bowel obstruction warrants immediate surgical management whereas Ogilvie's syndrome is one of the rare cases of large bowel obstruction which is to be managed conservatively.

KEYWORDS

INTRODUCTION

Acute colonic pseudo-obstruction or Ogilvie's syndrome is characterized by abnormal dilatation of the colon in the absence of any mechanical blockage and typically affects men and individuals aged 60 years and above. The incidence is approximately 100 cases per 100,000 hospital admissions per year [1].

Ogilvie's syndrome is thought to result from a functional disruption of the enteric nervous system, leading to an "adynamic colon" and temporary impairment of the parasympathetic system at the sacral plexus.

This can cause the distal portion of the large intestine to become flaccid and lead to functional obstruction. [2]. Risk factors include metabolic and electrolyte disturbances, infections, post-surgery, neurological diseases and drugs.

Case description

A 67-year-old woman presented with gradually worsening generalised abdominal pain and distension for 7 days. She had associated inability to pass stools, nausea and 3 episodes of vomiting since morning. History of loss of appetite for 4 days. No history of fever, chills, myalgia, bladder disturbances, recent antibiotic administration, or operative procedure. No H/o any comorbidities. Her vital signs showed a pulse rate of 110 bpm and blood pressure of 190/110 mmHg.

Abdominal examination revealed a soft non-tender, distended abdomen, abdominal girth measuring 107cm with a tympanic note on percussion with sluggish bowel sounds on auscultation. Umbilicus is in midline and inverted, with no scars/dilated veins/pigmentation. There is no visible peristalsis.

Abdominal x-ray showed a gaseous abdomen with dilated bowel loops with no air-fluid levels pronounced in the ascending and transverse segments and air-filled rectum (Fig.1). Computed tomography of the abdomen showed marked distension of the entire large bowel from the caecum to the rectosigmoid, and Cecal diameter measuring 8.1 cm in maximum transverse diameter (Fig.2). There was no evidence of an abrupt transition point or mechanically obstructing lesion.

There was no free abdominal gas. Initial laboratory workup was unremarkable. A digital rectal examination revealed a ballooned rectum. The patient was managed conservatively by withholding oral and fluid intake, IV fluids, nasogastric tube insertion and placement of a rectal tube to decompress the colon after which semi-solid faecal matter with gas was released (Fig.3). Fluid and electrolyte balance was optimised. The patient improved and her abdominal distension reduced significantly.

Fig.1: X-Ray abdomen- Gaseous abdomen with dilated bowel loops with no air fluid levels pronounced in the ascending and transverse segments.

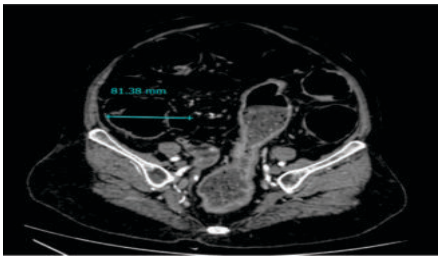

Fig.2: CT Abdomen - Marked distension of the entire large bowel from caecum to rectosigmoid with cecal diameter measuring measuring 8.1 cm in transverse diameter.

Fig.3: Improvement seen after insertion of rectal flatus tube after 24 hours

DISCUSSION

Acute colonic pseudo-obstruction or Ogilvie's syndrome is an uncommon functional ailment in which the colon experiences extensive dilation without any mechanical blockage. Symptoms include nausea, vomiting, abdominal distension and constipation. The symptoms resemble those of a mechanical blockage in the colon, but no gross pathology is detected. Mechanical obstruction commonly occurs when a tumour or scar tissue obstructs the movement of food and other substances through the gastrointestinal tract. It is most commonly encountered in elderly and comorbid patients. Commonly associated conditions include metabolic and electrolyte disturbances, following major surgery, neurological diseases like Parkinson's and Alzheimer's disease and drugs such as opiates, anti-Parkinson drugs, anticholinergics and antipsychotics. Conservative treatment is a viable option for managing Ogilvie's syndrome; however, failure to identify and treat it promptly can result in grave and possibly fatal consequences. Diagnosis is suspected in hospitalised patients with comorbid conditions and confirmed by clinical and radiological investigations. An X-ray of the abdomen shows a grossly dilated large bowel often limited to the caecum and the right colon. A CT of the abdomen helps to distinguish between other causes of large bowel obstruction which usually has a “transition point” [3].

The caecal diameter is of importance in deciding management, a diameter of <12 cm can be a given a trial of conservative management. A thorough examination is needed to detect signs of bowel perforation or ischemia when the caecal diameter is >12 cm. Signs of these complications require immediate surgical intervention. In cases where a cause (e.g. electrolyte disturbances, discontinuation of offending drugs, infection) has been established, treatment of the underlying condition is mandatory. If any particular medication is identified as a plausible trigger for Ogilve's, it must be discontinued immediately. Therapeutic options include supportive therapy, medications, decompression and surgery. Supportive therapies are withholding oral food and fluids, administering intravenous fluids to address fluid and electrolyte imbalances, and utilizing nasogastric or rectal tubes for decompression.

Recent studies have found that neostigmine, when administered intravenously, can lead to quick relief of colon distension in patients who have not responded to conservative treatment. Neostigmine operates by impeding the breakdown of acetylcholine, a neurotransmitter responsible for communication between nerve and muscle cells in the gastrointestinal tract, resulting in improved motility and transit of food and other materials through the GI tract [4]. However, patients with neostigmine contraindications can consider a Cystografin enema, which is believed to function by increasing intracolonic fluid due to its hyperosmolality [5]. Colonoscopic decompression, on the other hand, is only recommended for patients with significant colonic distension that persists despite other treatment modalities. Decompression techniques carry risks of perforation and recurrence [6]. Surgical management includes a cecostomy usually performed if perforation or ischemia is not present which otherwise requires a subtotal or segmental colonic resection [7].

CONCLUSION

A large bowel obstruction warrants immediate surgical management whereas Ogilvie's syndrome is one of the rare cases of large bowel obstruction which is to be managed conservatively. An unusual presentation of a late middle-aged woman with no comorbidities, infections, operative history, electrolyte disturbances or medications makes it a fascinating case.

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