

Ogilvie Syndrome Induced by Antidepressant: A Case Report

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Abstract

Case Report

Ogilvie's Syndrome is a rare entity in which the colon becomes massively dilated without apparent mechanical obstruction. Patients on antidepressant drugs commonly complain of dryness of the mouth, tremors, blurring of vision and constipation, which are attributed to the anticholinergic action of the drugs. We report a case of a 39-year-old female case of gastrointestinal complication (pseudo-intestinal obstruction), which are considered rare according to a review of the literature.

Keywords: Ogilvie syndrome, intestinal pseudo-obstruction, antidepressants.

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INTRODUCTION

Acute colonic pseudo-obstruction (ACPO) is also known as Ogilvie's syndrome after Sir Heneage Ogilvie who first reported the condition in 1948 [1]. It is characterized by massive colonic distension in the absence of mechanical obstruction (80–90%), abdominal pain (80%), abdominal tenderness (62%), nausea and/or vomiting (60%), obstipation (40%), and fever (37%) [2]. ACPO occurs most often in hospitalized or institutionalized patients with serious underlying medical and surgical conditions and is an important cause of morbidity and mortality. The mortality rate is estimated at 40% when ischemia or perforation occurs. Several studies report that acute abdomen due to the use of antidepressants is rare [1-4]. Sood and Kumar reported a case of imipramine-induced colonic pseudo-obstruction as Ogilvie syndrome [1], though originally this name was given to intestinal obstruction with caecal perforation by Mc Mahon [4]. Later, Ross *et al.*, and Gupta and Narang reported similar cases with the use of imipramine hydrochloride [2, 3]. We report two cases to support the view that intestinal obstruction can be a complication of the use of antidepressant drugs.

CASE PRESENTATION

Our patient was a 39-year-old woman, on treatment for recurrent depressive disorder for the past 10 years with fluoxetine 80 mg/day and amitriptyline 150 mg/day. presented with vomiting and abdominal distension of 1 day's duration. Her vomitus was coffee ground in color, nonbilious, and associated with watery

diarrhea. The abdominal distension was of sudden onset and was progressive in nature. she also reported a low-grade fever (38°C) for 1 day. Her body mass index was 27.4 kg/m². There was no evidence of dry skin or pressure sores. On systemic examination, she was clinically stable except for mild tenderness in the right ileac fossa and increased bowel sounds on auscultation. There was no history to suggest trauma, infections, or other potential cardiac or neurological causes for his abdominal distension.

In addition, ultrasound of the abdomen revealed no abnormalities. All baseline investigations were within normal limits. X-ray of the abdomen (erect) revealed marked dilatation (Fig 1), especially of the right colon. Tomography of the abdomen revealed a dilated colon with colonic diameter exceeding 9 cm (Fig 2). There was no evidence of any mechanical obstruction noted.

We made a diagnosis of ACPO and decided to manage him conservatively with a combination of bowel rest, nasogastric tube decompression, and rectal tube placement. We also monitored his abdominal girth routinely; the initial measurement was 140 cm.

As the patient did not improve and showed signs of clinical deterioration, we decided to stop conservative management on the 3rd day.

We realized colonoscopy which showed a very distended colon (Fig 3) and we've done colonic

decompression by suction of air in sigmoid colon and rectum.

She made good clinical improvement and her abdominal girth reduced to 86 cm within 24 hours. She did not have any further recurrences.



Figure 1: X-ray of the abdomen showing dilated colon



Figure 2: Tomography of the abdomen confirming dilated colon and absence of any mechanical obstruction



Figure 3: Colonoscopy (without insufflation) shows important distension colon

DISCUSSION

Acute Colonic Pseudo-Obstruction is a motility disorder characterized by massive dilatation of the colon in the absence of an anatomic or mechanical lesion that obstructs the flow of intestinal contents. This form of adynamic ileus is also named Ogilvie's Syndrome. It carries the name of the British surgeon Sir William Heneage Ogilvie (1887 - 1971), who first reported it, in 1948. The mean age is reported in the sixth decade, predominantly in men [5], as in our patient.

In 95% of patients it is associated with an underlying disease. The most common associations are: non-operative trauma, infection (pneumonia, sepsis), cardiac (myocardial infarction, heart failure), obstetric or gynecologic disease (Cesarean section, normal vaginal delivery), abdominal/pelvic surgery, neurological (Parkinson disease, spinal cord injury, multiple sclerosis, Alzheimer disease), orthopedic surgery, medical conditions (metabolic, cancer, respiratory failure, renal failure), and surgical conditions (urologic, thoracic, neurosurgery). Several cases are associated with spinal anesthesia used during childbirth or surgery [5].

As a side-effect of antidepressants, A good rapport is required between the treating doctor and the psychiatrist. Such drug-induced complications will possibly become rare due to the introduction of specific serotonin reuptake inhibitors (SSRIs), which do not have anticholinergic side-effects. It is important to educate the elderly as well as patients in other age groups about the importance of diet and fluid intake to overcome constipation. The patients presented here were unlikely to have had discontinuation syndrome, as symptoms were present even before the drugs were discontinued. The discontinuation syndrome can occur due to abrupt stoppage of antidepressant drugs. The discontinuation syndrome can involve any system of the body, is usually transient in nature, emerges 24–48 hours after discontinuation, and lasts for 7–14 days [6]. The two patients whose reports are discussed here also developed the above-mentioned complications within 24 hours of discontinuation of the antidepressant drugs. Thus, slow tapering of the dosage of this group of drugs is recommended.

Imbalance in autonomic sympathetic and parasympathetic neural regulation is attributed to its pathophysiology. Cecum is the usual site of dilatation, but any part of the colon can be affected. Clinically, the patient presents with massive abdominal distention, altered bowel movement with or without pain, nausea and vomiting. Presentation may be similar to paralytic ileus.

Plain abdominal roentgenogram and contrast enema are the most helpful diagnostic tools. Main complications are impending perforation of the cecum from massive colonic dilatation and colonic ischemia in

diameters exceeding 12 cm, where the risk reaches 15% [7]. The awareness of the condition and its complications, early diagnosis and management can be life saving. Statistically, the mortality rate in early diagnosis is 15%, while it reaches 36-44% in delayed diagnosis [5].

Management is initially conservative and includes the following: Nothing per Oral (NPO), nasogastric tube (NGT), rectal tube, replacement of electrolyte and prone or knee chest posture if applicable [3]. Antibiotics may be given to provide some coverage for the patient when suspicion of bowel ischemia or perforation exists [9]. Choline-esterase inhibitor (Neostigmin) is being used successfully, leading to rapid colonic decompression and passage of flatus within 30 minutes [5]. Side effects of neostigmine due to parasympathetic over activity include increased salivation, increased bronchial secretions, hypotension, arrhythmia, asystole and bronchospasm. Therefore, it is recommended for the patient to be monitored in ICU. Any toxicity should be revised by Atropine. Surgery including Percutaneous endoscopic colostomy (PEC) and hemicolecotomy should be limited to refractory or deteriorating patients with signs of impending ischemia or perforation. Surgical treatments have higher morbidity and mortality rates [5]. ACPO is preventable in certain conditions as in post operative hospitalized patients by early mobilization and prevention of constipation. Early recognition is important to prevent fatal complications.

CONCLUSIONS

Intestinal Obstruction is a rare complication of Tricyclic Antidepressants and is more likely to ensue if the patient is elderly and there is a concomitant medical and Neurological disease. High index of suspicion and good drug history is required to mitigate the avoidable medical and legal consequences.

Human Ethics: Consent was obtained by all participants in this study.

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