



## ACUTE COLONIC PSEUDO-OBSTRUCTION (OGILVIE'S SYNDROME) - A RARE COMPLICATION IN TOTAL ABDOMINAL HYSTERECTOMY AND BILATERAL SALPINGO-OOPHORECTOMY (TAHBSO) WITH SIGMOIDECTOMY

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### ABSTRACT

Acute colonic pseudo-obstruction (Ogilvie's Syndrome) was first described by Ogilvie in 1948. It is characterized by colonic dilatation in the absence of mechanical obstruction or any obvious causes of paralytic ileus. The condition can occur in patients with various metabolic, surgical, and medical problems. It can also be idiopathic in a small percentage of patients. A 48 year old Malay lady newly diagnosed with ovarian carcinoma underwent with total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAHBSO) with sigmoidectomy. Post operatively noted the abdominal drain was 600cc (serous). We proceeded with a CT abdomen and showed a dilated large bowel with distal tapering with narrowing at anastomotic site at the rectum. Our impression was mechanical obstruction. We proceeded with colonoscopy to decompress the bowel and to re-look at the anastomosis site. Our diagnosis was pseudo-obstruction of colon (functional obstruction / Ileus) as there were no evidence of mechanical obstruction and the whole colon was found dilated. We believe that Ogilvie's Syndrome, though is an uncommon condition. The dilemma in diagnosis to consider when investigating patients who have recently undergone TAHBSO with sigmoidectomy. We advocate that colonoscopy at the earliest possible time can be of both diagnostic and therapeutic value.

**Keywords:** Ogilvie's Syndrome, colonoscopy, endoscopic decompression, total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAHBSO).

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### INTRODUCTION:

Sir William Heneage Ogilvie first described regarding a surgical condition of acute colonic pseudo-obstruction which is a non mechanical dilatation of the colon often associated with severe illness [1]. The dilatation involves the cecum and varying lengths of more distal colon. Often a "cutoff" of distention can be identified at the hepatic, splenic or sigmoid flexures. Cecal distention may become extreme (up to 20 cm or more) and result in perforation [2]. Vanek et al. did a retrospective study including 400 patients with acute colonic pseudo-obstruction, the most common predisposing conditions were non operative trauma, infection, and cardiac disease, each of which were associated with 10 percent of cases [3]. In this series, cesarean section and hip surgery were the most common surgical procedures associated with acute colonic pseudo-obstruction as

same as in our case. Ogilvie suggested an imbalance between the sympathetic and parasympathetic innervations of the colon. This neurogenic hypothesis has been shared by other authors, although explanations may differ slightly [4]. Ogilvie's syndrome is predominantly involves elderly patients with serious underlying diseases [5]. A case report of Ogilvie's syndrome in 23 year old pregnant women in the 28th week of pregnancy in Japan was also reported [6]. We advocate that colonoscopy at the earliest possible time can be of both diagnostic and therapeutic value

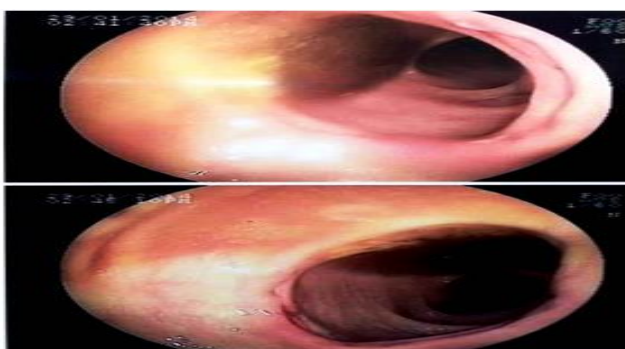
### CASE REPORT:

48 year old Malay lady, nulliparous was first seen in O&G clinic for prolonged menses for the past 1 year. Patient complaint of passing out bloody vaginal discharge with foul smelling for past 4 months, with prolong and

irregular menses and have LOA and LOW. On physical examination noted patient alert but pale. Per abdomen was soft, uterus 20 weeks size palpable, firm, smooth, mobile sideways, can't get below, no ascites. Ultrasound examination of uterus revealed that uterus was enlarged about 20 cm x 17 cm x 16 cm, uterine cavity filled in with mixed echogenicity clots admixed pus. The initial diagnosis was adenomyosis with pyometra. We proceeded with examination under analgesia with suction, dilatation and curettage. Post-operative diagnosis was endometrial carcinoma with cervical involvement. We proceeded with TABHSO with sigmoidectomy. Post operatively day 4 noted the abdominal drain was 600 cc (serous). A CT abdomen TRO anastomosis leak and the CT findings showed dilated large bowel with distal tapering with narrowing at the rectum. Impression was mechanical obstruction. We proceeded with colonoscopy decompression and to look for the anastomosis site. The finding was the entire colon was dilated until caecum. No area of narrowing seen throughout the whole colon, especially in rectosigmoid area. Our diagnosis was Pseudo-obstruction of colon (functional obstruction or ileus) as there is no evidence of mechanical obstruction and the whole colon is found distended. A flatus tube was inserted to assist mobility of the colon. Post decompression patient recovered well and was discharge home.



**Figure 1 & 2: CT Abdomen shows dilated large bowel with distal tapering and some narrowing at the presumed anastomotic site at the rectum. Impression was Mechanical obstruction.**



**Figure 3 & 4: Whole colon is dilated (without any insufflation) and liquid faecal matter present all the way until caecum. No area of narrowing seen throughout the whole colon, especially in rectosigmoid area.**

## DISCUSSION:

Acute colonic pseudo-obstruction (Ogilvie's Syndrome) is rare and has been reported as isolated case reports or small case series. It is described by a clinical and radiological picture of acute large bowel obstruction without a mechanical cause. It has most commonly been reported after pregnancy or Caesarean section, although has also been reported to occur after trauma and severe burns [7]. The documented mortality of Ogilvie's syndrome ranges from 35% to 72% [8]. It has a higher incidence in men compared to women with a ratio of 3:2. Despite this, caesarean section was reported as the leading cause in a large meta-analysis [3]. The association between caesarean section or TAHBSO and Ogilvie's syndrome may be explained by the close proximity of the parasympathetic nerves (S2-S4) to the female reproductive organs, rendering them susceptible to damage intra-operatively [9]. As in our patient's case, the presenting symptoms include abdominal distension with vomiting and hyperactive bowel sounds. CT abdomen may be useful to rule out a mechanical cause for obstruction. Management of Ogilvie's Syndrome can be classified into non-surgical and surgical treatment, although arguably diagnosis and recognition are the most important aspects of care. Indeed, significant morbidity and mortality from the condition has been reported when there is a wrong diagnosis, most commonly paralytic ileus, and a delay in the diagnosis of bowel perforation, usually by junior obstetric or general surgical doctors [10]. The mode of treatment, age, cecal diameter, delay in decompression, and status of the bowel significantly influence the mortality rate, which is approximately 15 percent with early appropriate management, compared with 36 to 44 percent in perforated or ischemic bowel. This risk naturally has led to considering colonoscopic decompression as an alternative form of treatment. Colonoscopy provides a new effective treatment modality for colonic decompression. We discuss the case of this patient with Ogilvie's syndrome, who was successfully treated by colonoscopic decompression. Special guidelines for successful and safe performance of the procedure are suggested. If conservative management fails to control the dilatation and caecal rupture is impending or suspected emergency surgery is indicated. Surgical management is associated with a high mortality and morbidity. It is only implicated if there are signs of colonic ischaemia or perforation, a large caecal diameter (> 9 cm) or if conservative therapy has failed. Intraoperatively, if there is no perforated or ischaemic bowel, a caecostomy or appropriate colostomy is the procedure of choice. Otherwise a subtotal or segmental colonic resection is indicated. The bowel may then be exteriorised or an ileorectal anastomosis can be formed. Surgical intervention may become necessary in the patient with megacolon who appears at high risk of perforation and has failed pharmacological and colonoscopic attempts at decompression [11]. In a case study of Dott. Fausto Catena *et al.* described that a majority of patients, 72% were submitted to surgery and this result can be explained by the fact that in the DPT only severe OS are admitted. In 2 cases there was a perforation risk whereas in the remaining patients there was long lasting medical treatment failure. Dott. Fausto

Catena et al carried out 6 decompressive caecostomy and 2 subtotal colectomies: these last operations have to be reserved to selected cases. As a matter of fact surgical procedures for OS have high morbidity and mortality in Dott. Fausto Catena et al series it was 37% in which these patients have poor general conditions. However medical treatment has recurrences while surgery is a problem solving therapy. In conclusion surgery has to be considered a good option for severe OS with failure of medical and endoscopic treatment [11].

## CONCLUSION:

We believe that Ogilvie's Syndrome though uncommon, is a diagnosis to consider when investigating patients who have recently undergone TAHBSO with sigmoidectomy. Colonoscopy at the earliest possible time can be of both diagnostic and therapeutic value as it provides: a) exclusion of obstruction and establishment of the diagnosis among other possible causes of colonic dilatation and b) successful decompression of the colon of the patients. Colonoscopy provides a new effective treatment modality for colonic decompression in Ogilvie's Syndrome.

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