



OGILVIE'S SYNDROME: CASE REPORT

Dr Fariza Khanam

Consultant Obstetrician, Department Of Obstetrics, Fernandez Hospital, Hyderabad, Telangana, India- 500029

Dr Sheeba Rani

Consultant Obstetrician, Department Of Obstetrics, Fernandez Hospital, Hyderabad, Telangana, India- 500029

ABSTRACT

Ogilvie's syndrome also known as acute pseudo-colonic obstruction (ACPO) is a distinct form of colonic dilatation without evidence of underlying mechanical or anatomic cause. It is a rare presentation following a cesarean section. High index of suspicion, prompt diagnosis and management are key to reducing the high rate of morbidity and mortality associated with Ogilvie's syndrome. Here, we present a case of Ogilvie's syndrome after a cesarean section.

KEYWORDS :**Case Details:**

Mrs X, aged 24, BMI of 25.1 kg/m², Gravida 4 Para 3 Live 3 with 3 previous vaginal births with last child birth in 2019. She was a known case of hypothyroidism since 2019 and was on Thyroid medication. Her other medical, surgical, allergy or family history was unremarkable. All baseline antenatal investigations were normal except anemia with a Hemoglobin of 9 gm/dl and she was on Oral Iron therapy. Fetal well being scan done at 32 and 36 weeks showed an appropriately grown fetus with normal liquor.

Admission Details:

She was admitted at 37 weeks of gestation, with prelabour rupture of membranes and thin meconium stained amniotic fluid. After discussing with the couple, augmentation of labor was planned with Oxytocin. The fetus was monitored during the intrapartum period with CTG monitoring. In view of a suspicious CTG pattern, fetal blood sampling was done which showed acidosis (Lactate- 8 meq/L) at 4 cm of cervical dilatation. An emergency cesarean section was done in view of presumed fetal compromise. She birthed a babygirl, with 2600 gms birth weight, normal APGAR and cord blood gas analysis. She had atonic PPH and the Quantitative blood loss was 1000 ml. The intraoperative period was uneventful. She received antibiotics as per the hospital protocol. She was discharged on the 2nd post operative day with stable vitals and she tolerated regular diet, was ambulating and had bowel movement.

Readmission:

On 4th postoperative, she presented to the emergency room with abdominal pain and distention and multiple episodes of bilious vomiting. On examination, she was febrile with a temperature of 101 °F, tachycardiac (Pulse rate 125 bpm) normal BP recording and Oxygen saturation. On clinical examination her abdomen was grossly distended, and on palpation there was rebound tenderness with guarding and rigidity and a tympanic note on percussion. On auscultation bowel sounds were hyperactive. She had been immediately referred to a centre with surgical gastroenterology setup and was admitted for further evaluation and management.

Management:

She was kept nil per oral, adequately hydrated by intravenous fluids, and a naso-gastric tube was placed.

Investigations showed mild anemia (Hb-10 gms) and white blood cell count- 17,800/cumm, serum electrolytes showed hypokalemia and ABG showed lactate-1.9 meq/l,

Imaging:

Bed side Ultrasonography showed distended and dilated

bowel loops, no free fluid in Pouch of Douglas and Morisson pouch.

X-ray erect abdomen was suggestive of caecal diameter of about 9 cms and no evidence of fluid beneath the diaphragm.

As the general condition was deteriorating CECT scan was done which showed extensive pneumo-peritoneum with multiple loculated peritoneal collections showing air pockets suggestive of hollow viscus perforation (likely caecum and ascending colon). She was started on IV antibiotics, antipyretics and analgesic medication was given.

Exploratory Laparotomy: After maternal stabilization and correction of sepsis she was taken for exploratory laparotomy. Intra Operative findings showed Gross purulent and feculent fluid in peritoneal cavity, interbowel pus flakes, grossly dilated large bowel loops with caecal gangrene and perforation and rest of small bowel was normal. Ileo-caecal resection and end ileostomy done.

Post operative recovery was uneventful and she had been planned for restoration of continuity. She had a restoration of continuity surgery after 3 months.

DISCUSSION:

Ogilvie's syndrome (OS) was first described by Sir William Henege Ogilvie in 1948.(1) It is also known as acute pseudo-colonic obstruction. It is a rare but serious complication following abdominal surgeries including cesarean sections. It rarely occurs after a cesarean section without any identifiable risk factor. (2) The incidence following cesarean section is around 1 in 800.(3) The exact cause of OS is not completely understood, but it is thought to involve a combination of factors which include autonomic dysregulation that means, postoperative stress that can affect the autonomic nervous system, leading to reduced peristalsis in the colon or electrolyte imbalances after surgery which can disrupt normal bowel function or medications such as Opioids and other analgesics used for pain management which can contribute to decreased gastrointestinal motility. It commonly presents as abdominal distension, pain, nausea, vomiting and altered bowel movements.(4) Patients typically present between 48 hours to 12 days post operative period. It can be confused with paralytic ileus very commonly, and other differential diagnoses like mechanical bowel obstruction, volvulus or toxic megacolon. OS needs both clinical and radiological findings to confirm the diagnosis. Since it can be confused with most common complications following cesarean section, timely diagnosis and management is the key to reduce high rates of morbidity and mortality associated with OS. Abdominal X-ray is the most important diagnostic modality

showing the features consistent with bowel obstruction such as dilated colon. There may be pancolonic dilatation or segmental colonic dilatation particularly right sided and cecum. Water-soluble contrast enema is very helpful to rule the mechanical cause of large bowel obstruction. Computerized tomography scan can show free fluid inside the peritoneal cavity indicating bowel perforation. (5) Cecal dilatation has been reported as an excellent indicator for impending bowel perforation. Cecal diameter of 9–12 cm should be considered the critical point where urgent decompression is imminent to avoid the consequences of bowel wall ischemia and subsequent perforation, our case had a cecal dilatation of 9 cm. (2) Undiagnosed OS has a mortality rate as high as 40–50%. (6) The management of OS depends on the patient's clinical condition, electrolyte status and the cecal diameter on CT imaging. In uncomplicated cases conservative management can be given till 48 hours with careful monitoring. Pharmacological management includes IV Neostigmine. In case of a complicated OS with high chance of perforation surgical management is the choice of treatment. Surgical management includes exploratory laparotomy with bowel resection and anastomosis. (7,8)

CONCLUSION:

Ogilvie's syndrome is a rare and yet significant postoperative complication that can arise after cesarean sections. As there is a rise in the cesarean section rate globally it is very important for care providers to be aware of OS and differentiate it from other post operative symptoms. Timely identification, diagnosis and management will reduce the risk of bowel ischemia and perforation and further reduce the high rates of morbidity and mortality associated with OS.

REFERENCES:

1. Ogilvie H. Large-intestine colic due to sympathetic deprivation; A new clinical syndrome. *British Medical Journal*. 1948;2(4579):671–673. doi: 10.1136/bmj.2.4579.671. [DOI] [PMC free article] [PubMed] [Google Scholar]
2. Müller-Aufdemkamp C, Huber K, Wolfrum-Ristau P, Sabus S, Fischer T (2011) Acute colonic pseudo-obstruction (Ogilvie's syndrome): a rare and serious complication after caesarean section. *Geburtshilfe Frauenheilkd* 71(5):399–404. <https://doi.org/10.1055/s-0030-1271097>
3. Ford E, Bozin M, Shedda S, J, Skandarajah A, Cade T. (2023) Risk factors for acute colonic pseudo-obstruction after caesarean section: a retrospective case-control study. *Aust N Z J Obstet Gynaecol* 63(1):86–92. <https://doi.org/10.1111/ajog.13583>. (Epub 2022 Jul 11)
4. Vanek V. W., Al-Salti M. Acute pseudo-obstruction of the colon (Ogilvie's syndrome). An analysis of 400 cases. *Diseases of the Colon & Rectum*. 1986;29(3):203–210. doi: 10.1007/BF02555027. [DOI] [PubMed] [Google Scholar]
5. Alshareef R. Y. Pediatric acute colonic pseudo-obstruction post complicated appendicitis. *International Journal of Case Reports and Images (IJRCI)* 2016;7(1):7–10. [Google Scholar]
6. Khan MW, Ghauri SK, Shamim S (2016) Ogilvie's syndrome. *J Coll Physicians Surg Pak* 26(12):989–991
7. A. Hughes, N. Smart, I. Daniels, Acute colonic pseudo-obstruction after caesarean section: a review and recommended management algorithm, *Obstetrician Gynaecol*. (2019), <https://doi.org/10.1111/tog.12602>.
8. Naveed M, Jamil LH, Fujii-Lau LL, Al-Haddad M, Buxbaum JL, Fishman DS, Jue TL, Law JK, Lee JK, Qumsey B, Sawhney MS. American Society for Gastrointestinal Endoscopy guideline on the role of endoscopy in the management of acute colonic pseudo-obstruction and colonic volvulus. *Gastrointestinal Endoscopy*. 2020 Feb 1;91(2):228–35.