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*RESEARCH ARTICLE*

# ACUTE COLONIC PSEUDO-OBSTRUCTION (OGILVIE SYNDROME) AFTER TOTAL HIP ARTHROPLASTY: A CASE REPORT

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## *Manuscript Info*

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Ogilvie syndrome; acute colonic pseudo-obstruction; total hip arthroplasty; postoperative complication; cecostomy; case report.

## *Abstract*

Acute colonic pseudo-obstruction, also known as Ogilvie syndrome, is a rare postoperative complication characterized by marked colonic dilat ation in the absence of mechanical obstruction.It has been reported after severe medical illness,abdominal surgery, obstetric procedures, trauma, and major orthopedic surgery. Early recognition is essential because delayed diagnosis and treatment may lead to colonic ischemia or cecal perforation. We report the case of a 59-year-old man who developed occlusive symptoms two days after total hip arthroplasty. Abdominopel vic computed tomography suggested large-bowel obstruction proximal to apparent rectal wall thickening, leading to exploratory laparotomy. Intraoperatively, diffuse dilatation of the colon and distal ileum was found without any mechanical obstacle, supporting the diagnosis of Ogilvie syndrome. A decompressive cecostomy was performed, follow ed by a favorable postoperative outcome. This case highlights the diagn ostic difficulty of Ogilvie syndrome after orthopedic surgery and emph asizes the importance of considering this condition in any postoperative patient presenting with abdominal distension and features of bowel obstruction.



## Introduction:-

Acute colonic pseudo-obstruction (ACPO), commonly referred to as Ogilvie syndrome, is defined as acute and marked colonic dilatation without a demonstrable mechanical cause. Since its original description by Sir Heneage Ogilvie in 1948, the syndrome has been recognized as an important cause of postoperative abdominal distension and bowel obstruction-like presentation.

The condition usually occurs in older patients with significant comorbidities or following a precipitating event such as surgery, trauma, sepsis, pregnancy, neurological disease, or major orthopedic intervention. Hip and knee arthroplasty are recognized but uncommon triggers. The pathophysiology remains incompletely understood and is thought to involve autonomic dysregulation of colonic motility, with sympathetic overactivity, parasympathetic dysfunction, or both.

Because progressive colonic dilatation may result in ischemia or perforation, early diagnosis and appropriate management are crucial. We report a case of postoperative Ogilvie syndrome occurring shortly after total hip arthroplasty and discuss the diagnostic pitfalls and therapeutic implications.

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**Case Presentation:-**
A 59-year-old man with an 8-year history of hypertension underwent total hip arthroplasty. On postoperative day 2, he developed features of intestinal obstruction, including cessation of stool and flatus, vomiting, and lower gastrointestinal bleeding. He remained afebrile and in a relatively preserved general condition.

Four days after the orthopedic procedure, he was admitted for further evaluation. On examination, he was conscious, hemodynamically stable, and respiratorily stable. Abdominal examination revealed distension without hepatosplenomegaly. Digital rectal examination showed a healthy anal margin, normal sphincter tone, and stool on the examining finger. No abdominal wall hernia was identified, and lymph node areas were unremarkable.

Abdominopelvic computed tomography suggested a mechanical large-bowel obstruction proximal to an apparent budding rectal wall thickening. Bilateral renal microlithiasis without excretory tract obstruction was also noted. Because of the radiologic suspicion of an obstructive rectal lesion, the patient underwent exploratory laparotomy. Through a midline incision, no peritoneal effusion was found. Surgical exploration revealed diffuse dilatation of the small bowel, measuring approximately 4 cm, marked cecal dilatation of approximately 10 cm, and dilatation of the entire colon. No digestive wall thickening and no mechanical obstacle were identified. On the basis of these operative findings, acute colonic pseudo-obstruction was retained as the final diagnosis. A decompressive cecostomy was performed. The postoperative course was favorable, with progressive clinical improvement after decompression.

## Discussion:-

Ogilvie syndrome is an uncommon but potentially serious postoperative complication that clinically mimics mechanical large-bowel obstruction despite the absence of a true obstructive lesion. It has been described after major orthopedic procedures, particularly hip and knee arthroplasty. Reported risk factors include advanced age, male sex, comorbid illness, electrolyte imbalance, immobility, and exposure to drugs that reduce intestinal motility.

In the present case, the onset of symptoms on postoperative day 2 after total hip arthroplasty was compatible with the early postoperative timing reported in the literature. The patient presented with abdominal distension and occlusive symptoms while maintaining an initially stable general condition, a pattern that may delay recognition of the syndrome.Cross-sectional imaging is essential to exclude mechanical obstruction, ischemia, or perforation. However, radiologic interpretation can be challenging. In this patient, computed tomography suggested a rectal wall abnormality and therefore raised suspicion of true mechanical obstruction. The final diagnosis was made intraoperatively when diffuse bowel dilatation was found without any mechanical cause.

Management depends on the degree of colonic dilatation, clinical severity, and the presence of complications. Initial conservative treatment includes bowel rest, nasogastric or rectal decompression, correction of electrolyte abnormalities, withdrawal of precipitating medications, mobilization when possible, and close clinical and radiologic monitoring. Pharmacologic treatment with neostigmine may be considered in selected patients without contraindications when conservative measures fail. Colonoscopic decompression is another therapeutic option. Surgery is generally reserved for suspected ischemia or perforation, failure of less invasive treatment, or diagnostic uncertainty.In this case, surgical management was chosen because imaging strongly suggested mechanical obstruction. Decompressive cecostomy led to a favorable outcome. This observation underlines the need to include Ogilvie syndrome in the differential diagnosis of postoperative abdominal distension after hip arthroplasty, even when imaging appears to suggest mechanical obstruction.

## Conclusion:-

Ogilvie syndrome is a rare but potentially life-threatening cause of postoperative bowel obstruction after total hip arthroplasty. Its presentation may closely mimic true mechanical obstruction, making the diagnosis difficult. Clinicians involved in perioperative and postoperative care should maintain a high index of suspicion when abdominal distension and occlusive symptoms occur after major orthopedic surgery. Early recognition and appropriate management are essential to reduce the risk of cecal ischemia, perforation, and mortality.

**Learning Points:-**
Ogilvie syndrome should be considered in patients with postoperative abdominal distension after major orthopedic surgery. Imaging may be misleading and may not always clearly distinguish pseudo-obstruction from true

mechanical obstruction. Early recognition is essential because delayed treatment increases the risk of colonic ischemia and cecal perforation. Management should follow a stepwise approach, but surgery may be required when complications or diagnostic uncertainty is present.

**Figures:-**

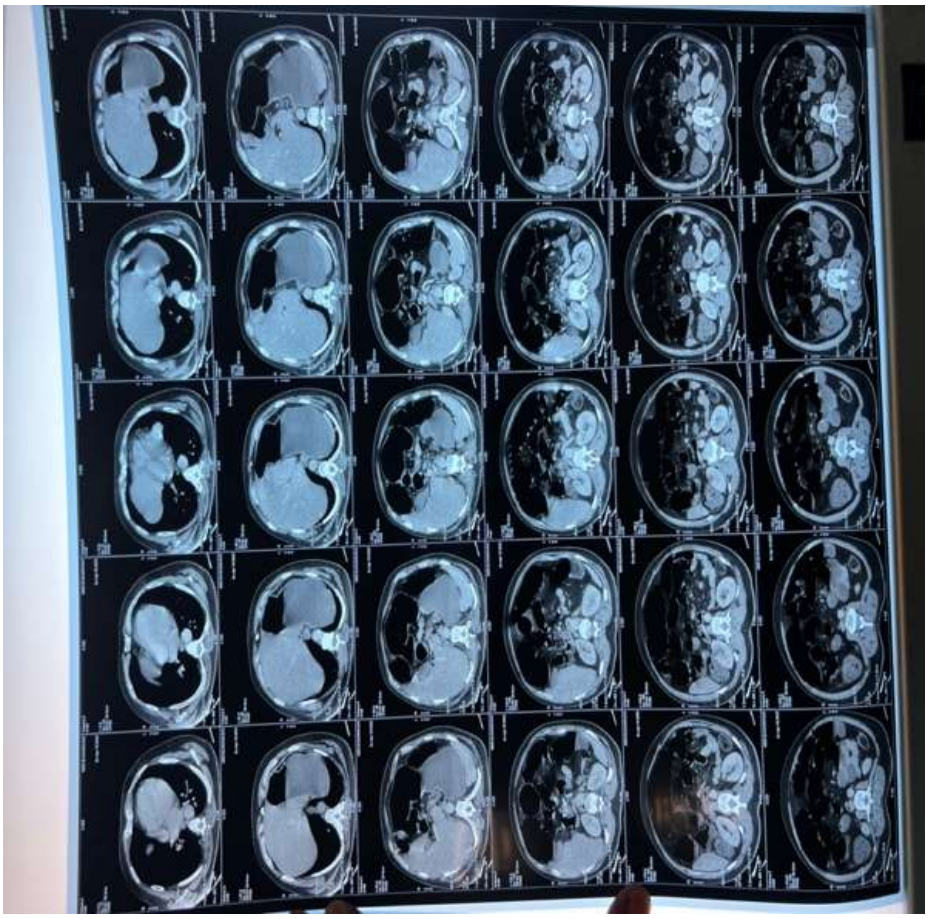

**Figure 1. Preoperative abdominal computed tomography showing marked colonic distension without a clearly identified mechanical transition point.**

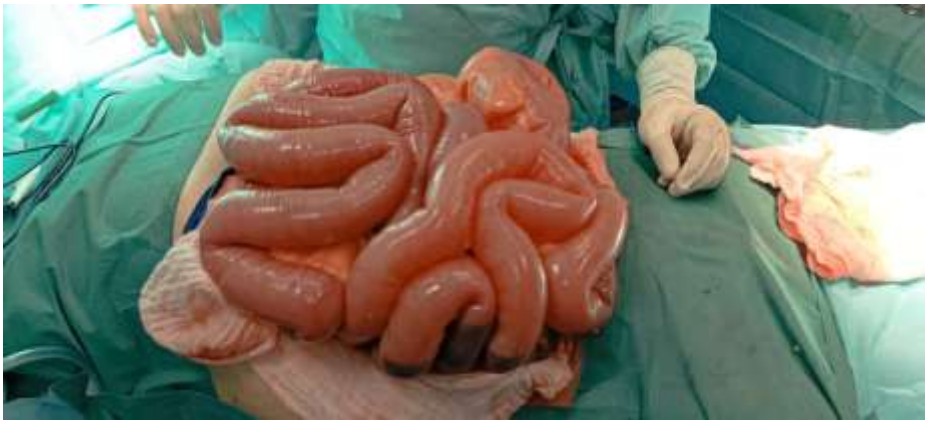

**Figure 2. Intraoperative finding of diffuse bowel distension without evidence of an obstructive lesion, supporting the diagnosis of acute colonic pseudo-obstruction.**

**Declarations:-**

**Ethical approval:-**

Institutional ethical approval was waived for this single retrospective case report according to local requirements.

**Consent for publication:-**

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

**Competing interests:-**

The authors declare that they have no competing interests.

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**Authors' contributions:-**

Kherrati Yasser contributed to data collection, manuscript drafting, and final revision. Btiti Kenza and Khaleq Khalid contributed to clinical management, data interpretation, manuscript review, and approval of the final version.

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