

---

## CASE REPORT

# Recurrent Acute Colonic Pseudo-Obstruction due to Electrolyte Disturbances

ALI ABID NAAZAR, MARK SMITH

### SUMMARY

Acute colonic pseudo-obstruction (ACPO) presents with symptoms and signs of acute colonic obstruction in the absence of mechanically obstructing lesion. Several risk factors have been identified in association with ACPO including electrolyte imbalance. We present a case of recurrent ACPO in a patient with severe electrolyte imbalance and nutritional deficiencies.

**Keywords:** Pseudo obstruction, electrolytes, colon

---

### CASE REPORT

A 57 year old lady presented to Emergency Department with intermittent nausea, vomiting, crampy abdominal pain, abdominal bloating and diarrhea. It was her third presentation in 12 months with similar complaints. She was diagnosed previously with colonic pseudo-obstruction and electrolyte imbalance due to laxative abuse. Her past medical history included chronic lower back pain, arthritis and hysterectomy. She was taking amitriptyline, oxycodone and gabapentin at the time. Her blood tests revealed severe electrolyte disturbances (sodium 121mmol/L, potassium 3.0mmol/L, chloride 76mmol/L) and her Hb was 55g/L. Abdominal x-rays showed markedly dilated loops of large bowel. She was admitted under general surgical team and managed with electrolyte replacement and blood transfusion. She underwent colonoscopy with the findings being consistent with ACPO. She was discharged once the long-term electrolyte replacement plan was confirmed by the dietician.



---

Bunbury Regional Hospital, Western Australia  
Correspondence to Dr. Ali Abid Naazar Email:  
aliabidnaazar@msn.com

### DISCUSSION

Pseudo-obstruction of the colon, also called Ogilvie's syndrome, was first described by Sir William Heneage Ogilvie in 1948 as a condition with symptoms and signs of colonic obstruction in the absence of a mechanical cause. It mainly affects elderly people. Ogilvie's syndrome is often associated with surgery or severe underlying medical conditions such as infection, cardiac disease, neurologic disease, respiratory disease, electrolyte imbalance, renal insufficiency, hypothyroidism, malignancy and recent chemotherapy.

Initial symptoms at the time of presentation include abdominal pain, abdominal distension, nausea and vomiting. On Physical examination abdomen is tympanic and bowels sounds are mostly present. Diagnosis is mainly clinical with dilated loops of large bowel on X-rays and CT abdomen without mechanical obstruction. The management of ACPO include identification and reversal of precipitating factors, where possible. Early symptomatic treatment includes fasting, IV fluids, nasogastric tube and correction of electrolyte imbalance<sup>1</sup>.

Acute marked colonic dilatation (>10cm) and/or failure to initial supportive therapy within 48-72 hrs require endoscopic decompression with or without decompression tube placement or medical treatment with neostigmine<sup>2</sup>. Endoscopic findings in Ogilvie's syndrome include an ischemic pattern of injury confined to mucosa characterised by crypt loss, basal regeneration and coagulative necrosis<sup>3</sup>.

Prompt diagnosis and intervention is the key in the management of Ogilvie's syndrome. Delay in diagnosis will lead to increased intra-colic pressure, subsequent bowel ischemia and perforation with mortality up to 50%<sup>4</sup>.

### CONCLUSION

Persistent electrolyte disturbances can lead to recurrent ACPO, a condition, which requires early

recognition and prompt management to avoid mortality.

## REFERENCES

1. De Giorgio R, Knowles CH: Acute colonic pseudo-obstruction. *Brit J Surg* 96:229-239, 2009
2. Saunders MD, Kimmey MB: Systematic review: Acute colonic pseudo- obstruction. *Aliment Pharmacol Ther* 22:917-925, 2005
3. Hao Xie and David M. Peereboom *Journal of Clinical Oncology*, Vol 30, No 21 (July 20), 2012: pp e192-e194
4. Rex DK: Colonoscopy and acute colonic pseudo-obstruction. *Gastrointest Endosc Clin N Am* 7:499-508, 1997