Acute Colonic Pseudo-Obstruction in a Patient with a Significant Closed Head Injury

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Citation

Abstract
Ogilvie's syndrome, or acute colonic pseudo-obstruction, is a rare clinical entity that usually accompanies other medical or surgical conditions. It usually responds to non-operative therapy, but occasionally requires surgical intervention. The case reported here is a patient who suffered a severe head injury from a fall and subsequently developed colonic distention. After ruling out true obstruction, the patient responded to conservative management.

INTRODUCTION
Sir Heneage Ogilvie, first described Ogilvie’s syndrome, or isolated colonic pseudo-obstruction, in 1948 in the British Medical Journal (1). In that article he described two patients who presented with isolated colonic distention without any point of obstruction. He postulated that the colonic ileus was secondary to an imbalance between parasympathetic and sympathetic innervation caused by metastatic disease to the celiac plexus.

Since that time there have been many case reports and small series of colonic pseudo-obstruction associated with many medical and surgical illnesses (2). What is presented here is a case of colonic pseudo-obstruction that presented in an elderly trauma patient with a significant head injury.

CASE PRESENTATION
The patient is a 74-year-old white female who presented after sustaining multiple injuries from a fall from a bike. Her injuries at presentation included a left clavicular fracture, a left tibial plateau fracture, and a closed head injury consisting of a left temporal lobe contusion with an associated intraparenchymal bleed, a small subdural hematoma, and a left temporal bone fracture. A CT scan of her abdomen was obtained at admission, and that was negative. She was admitted to the neurosurgical intensive care unit. During the course of her hospitalization, she was taken to the operating room twice: once for drainage of her subdural hematoma, and once to fix her tibial plateau fracture. On post-injury day number thirteen she was noted to have isolated increasing abdominal distention with no other symptoms. She had previously been on enteral nutrition without any problems. The tube feeds were held, and a KUB was obtained which demonstrated isolated colonic distention (Fig. 1). She remained afebrile, had a normal white cell count, and was not acidotic. A thorough physical exam and rigid sigmoidoscopy revealed no mechanical reason for the colonic distention. The patient was treated conservatively with strict NPO and insertion of a rectal tube. The distention slowly resolved over several days to the point that enteral nutrition could be restarted four days later and the patient was eventually discharged to a rehabilitation facility.

DISCUSSION
Acute colonic pseudo-obstruction is a rare condition usually arising in elderly patients (1), many of whom have concomitant medical or surgical problems. Several conditions have been associated with the development of acute colonic pseudo-obstruction; these include sepsis (2), burns (4,5), obstetric or gynecologic procedures (3,6,11), orthopedic surgery (7,8), urologic surgery (3), renal transplantation (9), electrolyte abnormalities, myocardial infarction, respiratory failure (3), pancreatitis, and certain

{image:1}

{image:2}
drugs. However, the precise pathophysiology involved in these various conditions remains to be fully elucidated. The mechanism involved in Ogilvie’s syndrome associated with significant head injury is also unclear, whether it is a manifestation of subtle neuro-hormonal imbalances resulting from the head injury, electrolyte disturbances, or altered functioning of the autonomic nervous system as originally suggested by Ogilvie is unknown.

The diagnosis of Ogilvie’s syndrome is one of exclusion in an appropriate clinical setting. It is usually made in an elderly patient with other medical problems or in the postoperative setting. The symptoms are acute in onset and consist of abdominal distention, nausea, vomiting, and abdominal pain. There may also be associated constipation, but diarrhea is also seen with this syndrome. The physical exam is remarkable for a distended, tympanitic abdomen, hypoactive bowel sounds, and sometimes fever and abdominal tenderness. There must be a diligent search for true mechanical colonic obstruction that would require further intervention. Included in this differential diagnosis are fecal impaction, colonic or rectal tumor, and cecal or sigmoid volvulus, and toxic megacolon.

The treatment of colonic pseudo-obstruction varies with the condition of the patient and the severity of the symptoms. The first step is to ascertain that there is no mechanical obstruction that requires operative correction. Most patients deserve a trial of conservative therapy first, since the vast majority of patients will respond to nonoperative treatment. In an appropriate clinical setting. It is usually made in an elderly patient with other medical problems or in the postoperative setting.

CONCLUSION

Acute intestinal pseudo-obstruction is a rare clinical entity that occurs most frequently in patients that have other underlying medical or surgical conditions. The case reported here is one of the few associated with a significant head injury. As in this case, most can be treated with conservative or minimally invasive procedures. Those patients that do not improve or worsen during treatment warrant surgical intervention.

References

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