

Giant faecaloma as a complication of neuroleptic treatment – case report

Piotr Rękawek, Jarosław Lichota, Pawlus Jan, Krzysztof Motyl, Tadeusz Sulikowski

Abstract:

A faecal impaction is a condition that is well known as a complication of long-term neuroleptic treatment. Rarely can provide life-threatening complications such as gastrointestinal obstruction. Long-term consolidation of faecal masses can lead to create a well-formed, hard intraluminal conglomerate (faecaloma). Faecaloma can be successfully conservatively treated. In some cases endoscopic methods may be effective. Rarely surgical treatment is required. Prophylaxis of faecal impaction is important to patients undergoing neuroleptic therapy. Indispensable is to monitor the patient's condition for constipation and obstruction of the gastrointestinal tract. In this case study, we want to present a case of a giant faecaloma, which appeared as a complication of neuroleptic treatment.

neuroleptic treatment; faecal impaction; clozapine, faecaloma

INTRODUCTION

Colon obstruction is a condition that commonly occurs in a surgical practice and can be dangerous to patient's health and life. In most of the cases it appears as a result of previous operations, colonic or rectal tumor and conditions such as volvulus or stenosis, that may be caused by: diverticular disease, developmental or genetic defects in the intestines (e.g. caused by Hirschsprung's disease) [1,2]. In rare cases colonic obstruction may arise due to faecal impaction [3,4,5]. Surgical treatment is rarely used in

the event of obstruction, caused by faecal masses. In this case study, we want to present a case of a giant faecaloma that was surgically treated with a left-sided hemicolectomy after failure of conservative treatment.

CASE REPORT

A 38 years old male, who suffered from chronic schizophrenia and asthma, was referred to hospital because of suspicion of gastrointestinal obstruction, which manifested as an abdominal pain and constipation. Before hospitalization patients pharmacological treatment included: Clonazepam 0,5mg three time daily, Clozapine 100mg six times daily, Risperidone 4mg one time daily and Haloperidole 1mg three times daily. During first 24 hours of conservative therapy, which included cleansing enemas per rectum, intravenous Metoclopramidum and in-

Piotr Rękawek¹, Jarosław Lichota¹, Pawlus Jan¹, Krzysztof Motyl², Tadeusz Sulikowski¹: ¹Department of General, Minimally Invasive and Gastroenterological Surgery, Independent Public Teaching Hospital No. 1, Pomeranian Medical University in Szczecin, Poland; ²The Department of Diagnostic and Interventional Radiology, Independent Public Teaching Hospital No. 1, Pomeranian Medical University in Szczecin, Poland

Correspondence address: rekaw94@gmail.com

fusion of multi-electrolyte fluid with Drotaverine, Lignocaine and Metamizole, patient defecated multiple times. Despite excretion, in physical examination, considerable size tumor was palpable on the left side of the abdomen. Computed tomography scan was administered, which showed a large faecal mass at the sigmoid colon expand to 17 centimetres and rectum expand to 10 centimetres (Fig. 1-4). After an unsuccessful attempt of conservative management, patient was qualified to surgery. Laparotomy was performed. Distension of the left half of the colon was found intraoperatively – an attempt of evacuation of the faecal contents ended unsuccessfully. Left-sided hemicolectomy and protectional loop ileostomy proximal to intestinal anastomosis was performed, due the enormous distension. Second day after the surgery, patient was transferred to ICU because of respiratory failure and necessity of respirator-assisted breathing. Third day after surgery pleural drainage was performed because of pneumothorax. Due to displacement of visceral organs into the thoracic cavity, patient was qualified to relaparotomy. The Niesen fundoplication was conducted. After several ineffective extubations, a tracheostomy was performed. In the following days improvement of patient's general condition was observed. Patient was transferred back to the General Surgery Clinic. Patient's oral diet was expanded gradually. Finally, after 55 days of hospitalization patient was discharged.

DISCUSSION

A faecal impaction is a condition that is known as a complication of long-term neuroleptic treatment [6,7]. Rarely, it may manifest as an enormous enlargement of the colon caused by accumulations of faecal masses [8,9]. According to the literature, the accumulated fecal masses may cause complications in the form of ischemia and intestinal perforation as well as peritonitis [10]. Another rare complication (due to the proximity of anatomical structures) is acute urinary tract failure. The above can lead to serious complications such as obstructive nephropathy and pyelonephritis [11]. A faecal impaction may lead to colon obstruction which requires a surgical treatment because of the risk of severe conse-

quences [12]. Fecaloma can often be treated conservatively with laxatives, enemas, and manual stool removal. In some cases, non-invasive methods (e.g. mass removal with flexible sigmoidoscopy) may be effective, which allows to avoid segmental resection of the intestines. In the case of unsuccessful conservative or endoscopic treatment, the treatment of choice is laparotomy with segmental resection of the intestine. In very rare cases, the obstruction may be asymptomatic and have potentially fatal consequences, even without a prior symptomatic course [9, 13]. As a prophylaxis of faecal impaction in patients receiving neuroleptic therapy should be considered: increased water intake, administration of laxatives, increasing dietary fiber content to 30 g/day and discontinuation of medications that may contribute to intestinal hypomotility [14]. The effect of clozapine as a factor inducing gastrointestinal hypomotility is well documented in the literature [15]. Particular attention should be paid to patients with risk factors: elderly, male, patients in the first four months of treatment with clozapine, patients taking other drugs that may cause constipation, patients with a high daily dose of clozapine and patients with a previous episode of gastrointestinal obstruction caused by clozapine [16]. More research is needed in order to determine the actual scale of the problem and to develop uniform standards of management in the case of obstruction caused by the use of neuroleptics. It is necessary to conduct further thorough investigation and analyze the problem, based on careful observation of patients treated with neuroleptics and an in-depth study of cases described in the literature.

Conflicts of Interest

All authors declare that they have no conflict of interest.

REFERENCES:

1. Obokhare I. Fecal impaction: a cause for concern? *Clin Colon Rectal Surg.* 2012;25(1):53-58
2. Serrano Falcón B, Barceló López M, Mateos Muñoz B, Álvarez Sánchez A, Rey E. Fecal impaction: a systematic review of its medical complications. *BMC Geriatr.* 2016 Jan 11;16:4.
3. Altomare DF, Rinaldi M, Sallustio PL, Armenise N. Giant fecaloma in an adult with severe anal stricture caused by anal imperforation treated by proctocolectomy and ileostomy: report of a case. *Dis Colon Rectum.* 2009;52:534–537.

4. Cheng M, Ghahremani S, Roth A, Chawla SC. Chronic constipation and its complications: an interesting finding to an otherwise commonplace problem. *Glob Pediatr Health*. 2016;3:2333794.
5. Park JS, Park TJ, Hwa JS, Seo JH, Park CH, Youn HS. Acute urinary retention in a 47-month-old girl caused by the giant fecaloma. *Pediatr Gastroenterol Hepatol Nutr*. 2013;16:200–205.
6. Hayes G, Gibler B. Clozapine-induced constipation. *Am J Psychiatry*. 1995; 152:298.
7. Ozbilen M, Adams CE. Systematic overview of Cochrane reviews for anticholinergic effects of antipsychotic drugs. *J Clin Psychopharmacol*. 2009; 29:141–146.
8. Oke V, Schmidt F, Bhattarai B, Basunia M, Agu C, Kaur A, et al. Unrecognized clozapine-related constipation leading to fatal intra-abdominal sepsis – a case report. *Int Med Case Rep J*. 2015;8:189–192.
9. Logre E, Degravi L, Plantefève G, Contou D. A fatal fecaloma. *Int J Emerg Med*. 2020 Aug 20;13(1):46.
10. Serrano Falcon B, Barcelo Lopez M, Mateos Munoz B, Alvarez Sanchez A, Rey E. Fecal impaction: a systematic review of its medical complications. *BMC Geriatr*. 2016;16:4.
11. Joo N, Lee HS. Acute Hydronephrosis owing to A Giant Fecaloma in an Older Patient. *Ann Geriatr Med Res*. 2020 Sep;24(3):223-226.
12. Studer A-S, Lonergan A-M, Le Guillan S. Megabowel and giant fecaloma: a surgical condition? *J Gastrointest Surg*. 2019;23:1269–1270.
13. Leung JSY, Lee CC, Lee WK, Kwong PPK. Rapidly fatal clozapine-induced intestinal obstruction without prior warning signs. *Aust N Z J Psychiatry*. 2008;42:1073–1074.
14. Hussain ZH, Whitehead DA, Lacy BE. Fecal impaction. *Curr Gastroenterol Rep*. 2014 Sep;16(9):404.
15. Palmer SE, McLean RM, Ellis PM, Harrison-Woolrych M. Life-threatening clozapine-induced gastrointestinal hypomotility: an analysis of 102 cases. *J Clin Psychiatry*. 2008 May;69(5):759-768..
16. West S, Rowbotham D, Xiong G, Kenedi C. Clozapine induced gastrointestinal hypomotility: A potentially life threatening adverse event. A review of the literature. *Gen Hosp Psychiatry*. 2017 May;46:32-37.