

Megacolon associated with the chronic use of antipsychotic medication

Case Article

Ahmed B. Soliman and Mohamed Al-Shubaki

Department of General Surgery, Al Mouwasat Hospital, Dammam, Saudi Arabia.

ABSTRACT

Introduction: Constipation is a common problem among patients who are taking antipsychotic medication, there is a strong association between the use of risperidone and megacolon but the exact mechanism behind this has not established yet.

Case Report: We present a case of megacolon associated with the long-term use of antipsychotic medication, this patient needs surgical intervention to resolve the problem.

Discussion/Conclusion: Constipation and related complications represent a problem among psychotic patients who are taking antipsychotic medications, especially the older groups, more studies are needed to identify the exact relation that could be related to the disease itself or the use of a specific kind of medicine.

Key Words: Antipsychotic drugs, case report, megacolon, psychosis, risperidone.

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Corresponding Author: Ahmed B. Soliman, MSc, Department of General Surgery, Al Mouwasat Hospital, Dammam, Saudi Arabia, Egypt. **Tel.:** 01099350338, **E-mail:** abahgat33@gmail.com

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INTRODUCTION

Constipation is higher among psychiatric patients by 20–37% in comparison to the normal population^[1,2]. Multiple factors could stand behind the cause of constipation in patients with mental disorders such as antipsychotic drugs, decreased activity, decreased dietary fiber intake, and obesity^[3]. Even though the exact mechanism between the drugs that are taken and the constipation has not been clear yet^[4].

Risperidone is one of the most commonly used antipsychotic drugs in schizophrenia; it is an atypical antipsychotic which is acting on the 5HT receptor and D2 dopamine receptor. One case recorded in 2002 was suffering from Megacolon associated with the use of Risperidone which is thought to be dose-related. The patient has been improved after surgical decompression and dose reduction^[5].

We herein report a case of megacolon associated with antipsychotic drugs and Risperidone is one of the drugs that has been used in this patient.

CASE REPORT:

A 52-year-old female known to have hypertension and schizophrernia for which she is taking Citalopram

20 mg, Risperidone 30 mg, Aripiprazole 15 mg, and Propranolol 10 mg. The patient presented with her family at Al Mouwasat outpatient clinic with a 4 year history of chronic constipation and progressive abdominal distention, recently the patient has experienced marked distention and incontinence (Fig. 1).

Enema, laxatives, and Prokinetics have been tried but were not successful. Upon psychiatric assessment, the patient was found calm, normal appearance, poor eye contact not cooperative, and refused to talk.

Initial examination there are no signs or symptoms of toxemia, the abdomen was hugely distended, and a computed tomography scan of the abdomen and pelvis showed a grossly dilated large bowel with collapsed small distal rectal segment and normal caecum and small bowel loops (Fig. 2).

The patient was admitted to the ward at Al-Mouwasat Hospital, Initial trials by enemas to deflate the dilated colon failed. The patient was prepared for surgery and optimized medically.

Intraoperative there was huge dilatation of the whole colon from the caecum to the ano-rectal junction loaded with air and stool, normal small bowel enlarged mesenteric lymph nodes. A 217 cm of the colon has been excised,

9 cm from the rectal margin and 2.5 cm at the proximal ileal margin with an average 21 cm circumference (Figs 3 and 4). The patient started feeding the third day after surgery and was discharged after 17 days to home in good condition.

A histopathology report showed marked thickening of the muscularis propria identified at the distal end (rectal), focal colonic mucosal ulceration, focal colonic active colitis, ischemic changes, congestion, and hemorrhage. Mesentery showed dilated thrombosed blood vessels, focal fibrosis, and focal suppurative serositis. The appendix showed reactive lymphoid follicular hyperplasia, focal luminal fibrosis obliteration, and intraluminal fat infiltration, in addition to 15 reactive lymph nodes. Hirschsprung disease was excluded histopathologically and it was considered internal anal sphincter achalasia or intestinal neuronal dysplasia.



Fig. 1: Lateral view of a patient on operative table shows huge distended abdomen.



Fig. 2: The specimen (whole colon) after resection.

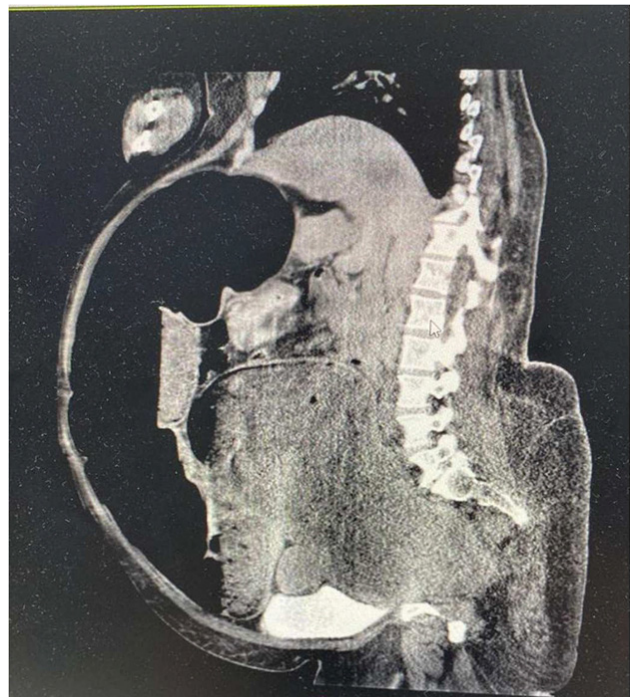


Fig. 3: Preoperative computed tomography scan showed a huge dilated colon.



Fig. 4: Postoperative view.

DISCUSSION

The mechanism by which the mental illness and the newly used atypical antipsychotic medication affect intestinal motility is not fully understood and many factors may play a role, however, there is a neurodevelopmental theory that states that there is a connection between the enteric nervous system and central nervous system and based on that the abnormal sympathetic reflexes lead to gastrointestinal motility in schizophrenia^[6-8].

The pain tolerance is high and the expression of pain sensation is altered in schizophrenia patients due to multiple factors as the symptoms of the disease which lead to apathy and flat expression with the disease progression perceived as mild symptoms by the treating physician. In addition, antipsychotic medications alter pain sensitivity^[9].

Because antipsychotic medication has an anticholinergic effect, constipation is one of the common complications of their use^[10]. In spite of the fact that risperidone devoid anticholinergic effect, it can cause constipation in 4.8% of patients^[11].

CONCLUSION

The studies showed that there is a high prevalence of constipation and related complications among psychiatric patients and more common in females the problems increase with the chronic use of antipsychotic medications^[4].

More caution should be directed toward these patients and medication doses to avoid the complications of chronic

constipation in psychiatric patients and early perceptions and prompt treatment of the problem of constipation because it needs more effort to discover the early signs and symptoms of the disease.

CONFLICT OF INTEREST

There are no conflicts of interest.

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