Clozapine-induced GI hypomotility: From constipation to bowel obstruction

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Patients who are treated with clozapine—a second-generation antipsychotic approved for treatment-resistant schizophrenia—require monitoring for serious adverse effects. Many of these adverse effects, such as agranulocytosis or seizures, are familiar to clinicians; however, gastrointestinal (GI) hypomotility is not always recognized as a potentially serious adverse effect, even though it is one of the most common causes for hospital admission.[1] Its manifestations range from being relatively benign (nausea, vomiting, constipation) to potentially severe (fecal impaction) or even life-threatening (bowel obstruction, ileus, toxic megacolon).[2]

GI hypomotility is caused by clozapine's strong anticholinergic properties, which lead to slowed smooth muscle contractions and delayed bowel transit time. It is further compounded by clozapine's 5-HT3 antagonism, which is also known to slow bowel transit time. To avoid the potentially serious risks associated with GI hypomotility, we offer simple approaches for clinicians to follow when treating patients with clozapine.

Teach patients to watch for GI symptoms

Before starting a patient on clozapine, and at all subsequent visits, ask him or her about bowel habits and GI symptoms. Because the onset of GI hypomotility can be subtle, ask patients to pay close attention to their bowel habits and keep a diary to document GI symptoms and bowel movements. Signs of bowel obstruction can include an inability to pass stool, nausea, vomiting, abdominal pain, and a bloated abdomen.

Table
Bowel regimen for chronic constipation

Stool softener (daily)
Docusate sodium 100 mg twice daily
Stimulant laxative (weekly and as needed)
Bisacodyl, 5 to 15 mg/d, as needed
Senna glycoside, 15 mg/d, as needed

Staff who care for patients taking clozapine who live in a supervised setting should be educated about the relevance of a patient's changing bowel habits or GI complaints. Also, teach patients about simple lifestyle modifications they can make to counteract constipation, including increased physical activity, adequate hydration, and consuming a fiber-rich diet.

Avoid anticholinergics, consider a bowel regimen

If possible, avoid prescribing anticholinergic medications to a patient receiving clozapine because such agents may add to clozapine's anticholinergic load. Some patients may require medical management of chronic constipation with stool softeners and stimulant laxatives. The ***Table*** outlines a typical bowel regimen we use for patients at our clinic. Some clinicians may prefer earlier and more regular use of senna glycoside. Also, patients might need a referral to their primary care physician if prevention has failed and fecal impaction requires enemas or mechanical disimpaction. An urgent referral to the emergency department is needed if a patient has a suspected bowel obstruction.

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References

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