Motherisk Update

Treating constipation during pregnancy

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Abstract
Question Many of my patients experience constipation during pregnancy, even after increasing dietary fibre and fluids. Are there any safe treatments I can recommend to them?

Answer Although the recommended first-line therapy for constipation includes increasing fibre, fluids, and exercise, these are sometimes ineffective. Therefore, laxatives such as bulk-forming agents, lubricant laxatives, stool softeners, osmotic laxatives, and stimulant laxatives might be considered. Although few of the various types of laxatives have been assessed for safety in pregnancy, they have minimal systemic absorption. Therefore, they are not expected to be associated with an increased risk of congenital anomalies. However, it is recommended that osmotic and stimulant laxatives be used only in the short term or occasionally to avoid dehydration or electrolyte imbalances in pregnant women.

It has been estimated that approximately 11% to 38% of pregnant women experience constipation,1 which is generally described as infrequent bowel movements or difficult evacuation.2 Pregnancy predisposes women to developing constipation owing to physiologic and anatomic changes in the gastrointestinal tract. For instance, rising progesterone levels during pregnancy and reduced motilin hormone levels lead to increases in bowel transit time.2,3 Also, there is increased water absorption from the intestines, which causes stool to dry out. Decreased maternal activity and increased vitamin supplementation (eg, iron and calcium) can further contribute to constipation.3 Later in pregnancy, an enlarging uterus might slow onward movement of feces.4 Constipation can result in serious complications such as fecal impaction, but such complications are rare. It is important to note that constipation negatively affects patients’ daily lives and is second only to nausea as the most common gastrointestinal complaint in pregnancy.2,4

Treatment
Many patients find relief from constipation with an increase in dietary fibre and fluids, as well as daily exercise. Probiotics that alter the colonic flora might also improve bowel function.5 If these are ineffective, laxatives are the second line of therapy (Table 1).2,5,6 In general, there are insufficient data on the use of laxatives in pregnancy; however, limited studies have been performed for specific laxatives, and the safety of others can be inferred from information about their systemic absorption (Table 2).7-16

Bulk-forming agents. Bulk-forming agents are not absorbed4 or associated with increased risk of malformations7; therefore, they are considered safe for long-term use during pregnancy. However, they are not always effective and might be associated with unpleasant side effects such as gas, bloating, and cramping.4

Stool softeners. Docusate sodium has not been associated with adverse effects in pregnancy in a number of studies, and it is thus also considered safe.
to use.\textsuperscript{7,10} There is one case report of maternal chronic use of docusate sodium throughout pregnancy, which was associated with symptomatic hypomagnesemia in the neonate.\textsuperscript{17}

\textbf{Lubricant laxatives.} Mineral oil is poorly absorbed from the gastrointestinal tract\textsuperscript{18} and does not appear to be associated with adverse effects.\textsuperscript{19} There is controversy about whether prolonged use reduces the absorption of fat-soluble vitamins, although this appears to be a theoretical rather than actual risk.\textsuperscript{20}

\textbf{Osmotic laxatives.} Lactulose and polyethylene glycol are poorly absorbed systemically.\textsuperscript{11,12} Their use has not been associated with adverse effects; however, individuals might experience side effects such as flatulence and bloating.\textsuperscript{3} Theoretically, prolonged use of osmotic laxatives might lead to electrolyte imbalances.\textsuperscript{3}

\textbf{Stimulant laxatives.} Absorption of bisacodyl is minimal as it has poor bioavailability.\textsuperscript{13,14} Senna does not appear to be associated with increased risk of malformations\textsuperscript{15}
and is not readily absorbed systemically. However, women might experience unpleasant side effects such as abdominal cramps with the use of stimulant laxatives. Similar to osmotic laxatives, prolonged use might theoretically lead to electrolyte imbalances.

Conclusion
The first line of therapy for constipation includes increasing dietary fibre and water intake and moderate amounts of daily exercise. If these are ineffective, laxatives are the second line of therapy. Because most laxatives are not absorbed systemically, short-term use has not been, and is not expected to be, associated with an increased risk of malformations. However, as with the general population, it is recommended that osmotic and stimulant laxatives be used only in the short term or occasionally to avoid dehydration or electrolyte imbalances and the theoretical risk of “cathartic colon.”

Competing interests
None declared

References

MOTHERISK Motherisk questions are prepared by the Motherisk Team at the Hospital for Sick Children in Toronto, Ont. Ms Trottier and Dr Erebara are counselors and Ms Bozzo is Assistant Director of the Motherisk Program.

Do you have questions about the effects of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at 416 813-7562; they will be addressed in future Motherisk Updates.

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