Drugs, Pregnancy, and Lactation

GI Agents: Part I

Antidiarrheal agents. The antidiarrheal agents diphenoxylate and its active metabolite atropine are weak narcotics. Available as Lomotil and Motofen when combined with atropine to prevent abuse, they present low risk in pregnancy. Although there is potential for toxicity in a nursing infant, infrequent use is probably compatible with nursing. Loperamide (Imodium) is low risk in pregnancy and lactation. Alosetron (Lotronex), a serotonin antagonist, has both antidiabetic and antidiarrheal properties. It is indicated only in women with IBS whose primary symptom is severe, chronic diarrhea. Based on animal data, it is considered low risk in pregnancy. Because severe GI toxicity (constipation, ischemic colitis) has been reported in adults, it should be avoided during lactation. Bismuth subsalicylate, such as Pepto-Bismol and Kapectate, should not be used in pregnancy or lactation.

Antacids. Antacids available to treat heartburn include calcium carbonate, magnesium hydroxide and oxide, and aluminum hydroxide and carbonate. Systemic absorption of antacids is negligible, so recommended doses are safe in pregnancy and lactation. However, magnesium carbonate is contraindicated because it is absorbed systemically and could cause alkalosis. Cimetidine (Tagamet), famotidine (Pepcid), nizatidine (Axid), and ranitidine (Zantac) and the proton pump inhibitors esomeprazole (Nexium), lanzerapazole (Prevacid), omeprazole (Prilosec), pantoprazole (Protonix), and rabeprazole (Aciphex). Low strengths of the histamine H₂ antagonists are available over the counter, but omeprazole is the only PPI available without a prescription. All of these antisecretory agents are low risk in pregnancy. The histamine antagonists are compatible with breast-feeding. In contrast, the PPIs have not been studied in breast-feeding, although they may cause diarrhea in a nursing infant.

Laxatives. Seven types of products act as laxatives: saline (phosphates and magnesium hydroxide and its salts); stimulants/irritants (cascara, bisacodyl, polyethylene glycol); softeners (docusate); hyperosmotics (glycerin, lactulose); and tegaserod (Zelnorm). With the exception of lactulose and tegaserod, all of these products are available over the counter, and most do not cause direct embryofetal toxicity. However, castor oil, which is converted to ricinoleic acid in the gut, is an irritant and may induce premature labor. Improper use of saline laxatives can cause electrolyte imbalances, and mineral oil will prevent absorption of fat-soluble vitamins.

Of the laxatives, bulking agents and fecal softeners are the best choices in pregnancy. Cascara sagrada and senna are extracted into breast milk and are compatible with breast-feeding, although they may cause diarrhea in a nursing infant. Tegaserod, a serotonin type-4 receptor agonist, is approved for women with irritable bowel syndrome with constipation. Tegaserod is contraindicated for those patients who have had a bowel transaction (isostomatic) and for idiocholic constipation in those under age 65. Limited animal and human data suggest a low risk for embryofetal toxicity, but the drug is best avoided during lactation because of the absence of any human data.