**TITLE: CHRONIC CONSTIPATION IN PREGNANCY**

**Subtitle: Treatment of chronic constipation in pregnancy**

**SUMMARY: Chronic constipation (CC) is one of the most common gastrointestinal maladies in the general population and occurs twice as commonly in women compared with men. CC may already exist in some pregnant people and symptoms may persist or worsen during pregnancy. In those without pre-existing CC, the condition may develop de novo in pregnancy. Obstetric providers should be familiar with safe, effective therapies, both over the counter (OTC) and prescribed, for pregnant people with this common complaint.**

**Rationale:** The prevalence of constipation ranges from 11 to 38% in pregnancy through 3 months postpartum. The pathophysiology includes a number of factors: hormonal changes, mechanical and anatomic alterations, changes in water absorption, diet, and physical activity, and new medications or supplements.CC is known to impact quality of life in a negative manner which may be exacerbated by coincident pregnancy. Given recent advances in pharmacotherapy for CC, providers must be ready to discuss the fetal and maternal risks/benefits for pregnant people on established treatment regimens as well as those who need to initiate medications for the first time during pregnancy.

**Eligible patients:** Pregnant people with constipation unresponsive to life-style modifications including dietary fiber (20-35 gm/day), liquids, and exercise.

**Contraindications:** Intolerance of prescribed therapy

**Technique:** Use stepped care as discussed below.

**OTC MEDICATIONS: All FDA Cat C except Bulk fiber and Lactulose which are Cat B**

1. Bulk Fiber: Natural (psyllium, ie Metamucil and wheat dextran, ie Benefiber) vs Synthetic (polycarbophil, ie FiberCon) vs Semisynthetic (methylcellulose ie Citrucel)- 2.5-30 gm daily in divided doses
	1. PROS-not systemically absorbed, unlikely to affect fetus, inexpensive, easily available, likely safe in breastfeeding
	2. CONS-requires adequate fluid intake, takes several days to work, delayed symptom relief, associated with cramping and bloating, must increase dose slowly from 3 gm/d up to 20-30 gm daily as tolerated, **contraindicated in fecal impaction**
2. Stool Softeners: Ducosate sodium-50-360 mg daily or in divided doses
	1. PROS: Unlikely to affect fetus, inexpensive, easily available, rectal formulations available
	2. CONS: Appears less effective than fiber, one case report of neonatal hypomagnesemia w/ maternal overuse, diarrhea in some nursing infants
3. Osmotic Laxatives:
	1. Polyethylene glycol (PEG)-17 gm dissolved in 120-240 mL fluid once daily
		1. PROS: minimal systemic absorption, rapid excretion, unlikely to affect fetus, considered low risk for breastfeeding
		2. CONS: None noted
	2. Lactulose- 10-20 gm daily
		1. PROS: Very limited systemic bioavailablity (<3%), unlikely to affect fetus, low risk for breastfeeding
		2. CONS: Unpleasant side effects including nausea, abdominal cramping, flatulence, may be less effective than PEG, **USE PEG FIRST**
	3. Magnesium based osmotic salts (MG-oxide, -hydroxide, -citrate):195-300 mL daily or in divided doses
		1. PROS: Low risk when used short term (based on other limited uses in pregnancy), compatible w/breastfeeding at recommended doses
		2. CONS: Long term use associated with sodium retention and/or hypomagnesemia.
4. Stimulant Laxatives
	1. Senna (7.5-30 mg/d)
		1. PROS: very effective, minimal intestinal absorption, unlikely to affect fetus, low risk short term, active metabolite present in breastmilk but no effect on infant bowel habits noted (AAP compatible with breastfeeding)
		2. CONS: more abdominal discomfort and inadvertent diarrhea w/resultant electrolyte imbalance, avoid long term use, **\*\*\*USE WITH CAUTION only when bulk and osmotic laxatives have failed**
	2. Biscodyl (oral 5-15 mg daily or 10 mg rectal)
		1. PROS: Considered low risk when used short term in pregnancy and safe for lactation (despite lack of data)
		2. CONS: Avoid long term use, **\*\*\*USE WITH CAUTION only when bulk and osmotic laxatives have failed**

**PRESCRIPTION MEDICATIONS**

1.Secretagogues

* 1. Chloride Channel Activators (Lubiprostone, ie Amitiza)-24 mcg BID- FDA Cat C
		1. i. PROS: minimal systemic absorption
		2. ii. CONS: nausea, **INSUFFICIENT DATA in PREGNANCY, Use only if benefits outweigh risks, use caution with breastfeeding**
	2. Guanylate Cyclase-C Receptor Activators
		1. Linaclotide (Linzess)-72 or 145 mcg daily- FDA Cat C
			1. PROS: Minimal systemic absorption, unlikely to affect fetus
			2. CONS: diarrhea in 4-16%, **use only if benefits outweigh risks, use caution in breastfeeding** (b/c serious dehydration may occur when given to children under age 6 based on animal studies)
		2. Plecanatide (Trulance)-3 mg daily- No FDA category assigned
			1. PROS: Minimal systemic absorption, unlikely to affect fetus
			2. CONS: **INSUFFICIENT DATA in PREGNANCY, use only if benefits outweigh risks, use caution with breastfeeding.**

**Special Considerations:**

1. Rectal Therapy with enemas is NOT RECOMMENDED due to availability of other more effective medications, associated electrolyte disturbances and uterine contractions as well as reports of uterine rupture.
2. Serotonin Agonists (Prucalopride, ie Motegrity): Available limited data suggest possible association with miscarriage. Use is NOT RECOMMENDED in pregnancy or lactation. No FDA category assigned.

**References:** Brigstocke , Yu V, and Nee J. Review of the Safety Profiles of Laxatives in Pregnant Women. J Clin Gaastoenteral, 56 (3), March 2022, p 197-203.

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