My Treatment Approach to Management of the Pregnant Patient With Inflammatory Bowel Disease

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Abstract

Inflammatory bowel disease (IBD) is frequently diagnosed in women of childbearing age. Of paramount concern are questions about the effect of the disease on a woman's ability to conceive and carry the pregnancy safely to term, as well as the effect of the disease and its therapies on the health of the fetus. For health care providers, there is also the issue of medication dose adjustments and management of flares during pregnancy. Growing experience with IBD in pregnancy suggests that most women will have good outcomes; however, concerns and uncertainty remain for both the patient and the physician. This article outlines our approach to the treatment of these patients with respect to preconception counseling and management during pregnancy and the postpartum period.

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Inflammatory bowel disease (IBD) can affect women during their childbearing years. This presents several unique treatment considerations in women with IBD who are contemplating pregnancy, attempting to conceive, or are pregnant. Most women will have a successful pregnancy, but close management of IBD during this time is crucial to a good outcome. This article will review the many issues that providers face in each stage of managing the pregnant patient with IBD.

PREPARING FOR PREGNANCY

Providers should ensure that a patient's vaccinations (hepatitis A and B, pneumonia, influenza, and tetanus/diphtheria/pertussis), colon cancer surveillance, and cervical dysplasia screening are up to date.[1] Routine laboratory tests should include a complete blood cell count and vitamin B_{12}, folic acid, and iron levels. In addition, physicians should consider checking vitamin D and tissue transglutaminase levels, particularly if a patient is having difficulty conceiving, because abnormal levels can be seen in patients with IBD and are associated with infertility.[2-4] Patients should ideally have established care with a primary care provider, a gastroenterologist, and an obstetrician who is comfortable with their medications. Also, their disease activity should be stable with maintenance therapy before conception. Medications that are absolutely contraindicated in pregnancy (eg, methotrexate and thalidomide) should be discontinued a minimum of 3 months, ideally 6 months, before conception, and alternative medical regimens should be started. Although the patient is usually focused on the risk of medications to the fetus, attention should be given to the risks of disease flare if medications are stopped. Ultimately, patients should have a pregnancy medication plan that they are comfortable with. Patients should be counseled that there is a 1.6% to 5.2% chance of the child developing IBD if a single parent has IBD[5]; this chance increases to 33% if both parents have IBD.[6,7]

GETTING PREGNANT

Active disease may reduce fertility,[8] so disease quiescence should ideally be achieved before attempting conception. The rates of fertility in women with stable IBD are generally similar to those in age-matched controls.[9] The one major exception is women who have undergone previous pelvic surgery, particularly an ileal pouch—anal anastomosis, which is associated with a 3-fold increase in infertility.[10] If calculated attempts to conceive are unsuccessful after 6 months and disease remission is confirmed and laboratory parameters are normal, the patient should be referred to a reproductive

endocrinologist for evaluation and assistance in management. In our experience, the medications commonly used to assist the reproductive process do not significantly affect IBD activity.

AFTER CONCEPTION

Effect of IBD on Pregnancy

Most studies suggest that women with IBD have higher rates of pregnancy complications compared with age-matched controls. Complications include increased risk of preterm delivery, low birth weight, spontaneous abortion, and peripartum complications, including preeclampsia.[11,12] Disease activity at conception and during pregnancy is associated with higher rates of adverse pregnancy outcomes,[13,14] but even patients with quiescent disease are at elevated risk for complications throughout their pregnancy compared with the general population.[12] Furthermore, maternal complications, such as venous thromboembolism and malnutrition, occur more frequently in women with IBD.[15,16] Therefore, we recommend that all women with IBD be followed as high-risk obstetric patients.

The decision regarding mode of delivery should be made on an individual basis between the patient and her obstetric provider. Generally, patients with active perianal disease should be encouraged to have a cesarean delivery owing to the risk of exacerbating disease. Although cesarean delivery for the patient with an ileal pouch–anal anastomosis is recommended in some centers, studies have suggested that vaginal delivery may be safe.[17,18] Patients without these conditions can be safely considered for vaginal delivery. We caution women against delaying or refusing cesarean delivery if labor is prolonged and the obstetrician recommends delivery. Forceps delivery and uncontrolled tears can affect pelvic floor function. In the patient with compromised bowel habits, this can have a substantial impact in the future.

Effect of Pregnancy on IBD

Women are not at increased risk for disease flare while pregnant or during the postpartum period compared with the nonpregnant patient with IBD.[12,14,19] Earlier studies had reported higher rates of disease flares in pregnancy and the peripartum period, but this observation was likely confounded by medication cessation during pregnancy or while breastfeeding and resumption of tobacco smoking after delivery.[12] In the national pregnancy registry Pregnancy in Inflammatory Bowel Disease and Neonatal Outcomes (PIANO), we observed a significantly higher rate of disease activity in patients with ulcerative colitis (UC) compared with Crohn disease.[20] This same effect has been reported in a European study as well.[21] Although the reasons for this are unclear (perhaps owing to secretion of pro-UC cytokines by the placenta), we are particularly mindful of disease activity in our patients with UC.

If a patient develops a disease flare during her pregnancy, the evaluation and management of symptoms are similar to those of the nonpregnant patient with IBD. Stool studies should undergo laboratory testing to exclude infection, particularly *Clostridium difficile*, which is more prevalent during the peripartum period.[22] If imaging is needed, ultrasound or magnetic resonance imaging is preferred over computed tomography to avoid exposing the developing fetus to radiation. Contrast agents, such as gadolinium, should be avoided in the first trimester because this compound has been associated with teratogenic effects in animal models.[23] We have used contrast imaging successfully in the second and third trimesters, but after discussion with our radiology colleagues. Endoscopic evaluation should be performed by unsedated flexible sigmoidoscopy if possible. A full colonoscopy is rarely required during pregnancy, but, if so, it should be performed with anesthesia support and fetal monitoring. Surgery should be considered for severe bleeding, medically refractory disease, or obstruction, if needed. The American College of Obstetricians and Gynecologists recommends that nonemergency operations should be performed during the second trimester, when preterm contractions and spontaneous abortion are least likely.[24]

MEDICATIONS

Most medications used for the treatment of IBD are considered compatible with pregnancy and breastfeeding. In general, the act of stopping medications and precipitating a possible disease flare poses a greater risk to the fetus than any potential adverse effects of most medications themselves. Therefore, we advise patients to have a thoughtful discussion with

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