ADVANCES IN IBD

Current Developments in the Treatment of Inflammatory Bowel Disease

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Contraceptive Use in Women With Inflammatory Bowel Disease

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G&H How common is inflammatory bowel disease in women of childbearing age?

LG Inflammatory bowel disease (IBD) impacts approximately 1.6 million Americans and is equally as common in women as in men. The median age of diagnosis is approximately 30 years old, which falls within the peak reproductive years for women.

G&H How does the rate of contraceptive use in women with IBD compare with that of the general population?

LG Women with IBD have been found to have lower rates of contraceptive utilization than women without chronic diseases. My colleagues and I conducted a cross-sectional survey several years ago and found that 40% of the participating women with IBD who were at risk for pregnancy—meaning those who were having sexual intercourse with a male partner and who had not undergone a hysterectomy or sterilization—were either not using any form of contraception or were relying on the least effective types, such as barrier methods. These patients were at risk for an unplanned pregnancy even though they said that they did not wish to become pregnant at the time. The patients who were least likely to use contraception had the most active disease and, in follow-up questions, said they were focused on their disease and felt that contraception was something they could not think about at the time. However, the worse time for women with IBD to become pregnant is during active disease, when the risk of adverse outcomes such as pregnancy loss and preterm delivery is highest.

In the survey, another reason women shared for low rates of contraception was that many women with IBD mistakenly thought that their disease reduced their fertility and that they would not become pregnant. However, research on fertility in women with IBD has shown that only those who have undergone specific types of pelvic surgeries, and not women with medically managed disease, have reduced fertility.

G&H How should a contraceptive method be selected for a patient with IBD?

LG When talking about contraception to a woman with or without IBD, doctors should always try to find the method that is in line with the patient's preferences. If a method does not seem like it would fit into the patient's life, it is not going to be used. Thus, the first step is to have a conversation about the patient's goals and whether she is at risk for pregnancy. Then, the efficacy of different contraceptive methods should be discussed, as not all methods are equally as effective.

G&H How effective are the various contraceptive options for women with IBD?

LG The most effective methods are intrauterine devices (IUDs) and contraceptive implants. They are as

effective as sterilization but can be reversed at any time if the patient is not happy with the method or if she desires pregnancy. These devices also tend to be the safest methods for women with chronic diseases. Thus, in addition to having low failure rates when a pregnancy may not be optimal because of disease activity, these devices are least likely to cause adverse outcomes related to contraceptive hormones themselves.

The next tier of contraceptive efficacy consists of short-acting hormonal contraceptives (eg, the birth control shot, patch, vaginal ring, or pills). All of these methods are more user-dependent (eg, the patient has to go to the doctor's office and get a shot every 3 months or the patient has to take a pill every day). Failure rates of short-acting hormonal contraceptives are slightly higher than with IUDs or implants because of dependence upon the patient on an ongoing basis and possible disruption to continuation (eg, the patient forgetting to take a pill or fill a prescription). The birth control shot has a failure rate of 3% over 1 year of typical use, whereas the combination and progestin-only pills, patch, and vaginal ring have a failure rate of approximately 8% over 1 year of typical use.

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Next in terms of efficacy are barrier methods and/or fertility awareness methods. Barrier methods are highly user-dependent because they have to be used for each episode of intercourse in order to be effective. Failure rates of barrier methods vary but can be as high as approximately 18% over 1 year of typical use because patients may forget to use these methods every time, devices could break, and so on. Failure rates of fertility awareness methods vary more because they require not only for the patient to have a regular menstrual cycle and to be able to predict it, but also to have a partner who is willing to be compliant with the method and not have unprotected intercourse when the woman is most fertile. Thus, failure rates of some fertility awareness methods can be as high as approximately 25% over 1 year of typical use.

G&H How safe are contraceptive methods in women with IBD?

LG Guidance regarding the safety of contraceptive methods comes from the Centers for Disease Control and Prevention's Medical Eligibility Criteria for Contraceptive Use. This evidence-based guidance reviews the safety of different contraceptive methods in the setting of many conditions, including IBD. For most women with IBD, all contraceptive methods are safe. However, for women who are at higher risk for blood clots (such as those with more severe IBD activity, those who are undergoing surgery, and those with a history of blood clots), contraceptive methods that contain estrogen (such as combination pills, the patch, or the vaginal ring) can further increase the risk of blood clots. It is important to remember that the risk of blood clots is significantly higher in pregnancy than with the use of estrogen-based contraceptives. Avoiding unintended pregnancy through an alternative contraceptive is even more important in these high-risk women.

G&H Should any contraceptive methods be restricted in women with IBD?

LG Contraceptive methods containing estrogen may be restricted by patients with a higher risk of blood clot, which includes patients with more severe disease activity, as discussed above. There are no other restrictions, unless there is another limiting component of the patient's medical history that is unrelated to IBD, such as a bicornuate uterus or another anatomic issue.

G&H Does the presence of IBD affect the side-effect profile of any contraceptive methods?

LG No difference in side-effect profile has been seen because of IBD, although sometimes it is difficult to determine whether patients are having side effects from their contraception or whether they are having disease-related symptoms from their disease activity. Women with IBD often note some mood changes, and IBD is highly associated with depression and changes in libido, all of which have also been associated, at times, with different hormonal contraception. Therefore, doctors should explain that these side effects are normal and can occur in any woman regardless of disease status. If the side effects impact the patient's quality of life, then the doctor should find another contraceptive method that potentially has fewer side effects and should make sure that the patient's IBD is well controlled.

G&H Do any medications used in the treatment of IBD, including biologic agents, affect the efficacy of contraception?

LG Biologic agents have been used for many autoimmune diseases, including IBD. Contraceptive methods do not affect biologic agents, and biologic agents do not affect the

efficacy of the contraceptive method. Women with IBD who require biologic agents typically have more severe or persistent disease. These women should consider highly effective, first-line contraceptive methods, such as an IUD or implant, to avoid contraceptive failure and an unintended pregnancy when their disease may be more active.

> Approximately 1 in 5 women said that their disease-related symptoms actually improved while on contraception.

G&H Does IBD surgery affect the use of contraceptives?

LG If a woman has had significant small bowel resections and has resulting malabsorption—which would most commonly occur in the setting of Crohn's disease and small bowel disease—she could, in theory, have decreased absorption of birth control pills. That being said, such a patient probably would not be the best candidate for birth control pills because they contain estrogen and she might have more active disease, increasing the risk of blood clots. Nevertheless, if a woman with IBD is concerned about tolerating oral medications, she and her doctor should choose a different method that does not depend upon oral absorption.

In addition, some women with IBD have significant pelvic pain, especially if they have undergone pelvic surgery, so placing an IUD might be difficult. Thus, doctors should ask patients if they are able to tolerate a pelvic examination and discuss ways to manage pain with IUD placement.

G&H Does contraceptive use affect IBD symptoms?

LG In the aforementioned study that my colleagues and I conducted, women with IBD were asked whether the contraceptive methods they had chosen in the past or were currently using had affected their disease-related symptoms. Approximately 1 in 5 women said that their disease-related symptoms actually improved while on contraception. This is likely because hormonal contraceptive methods decrease the amount of blood loss and reduce the amount of prostaglandin released in the pelvis, resulting in less cramping, which can irritate the bowel. Thus, many women had decreased abdominal pain and cramping around their menstrual cycles because their menstrual cycles improved.

G&H Could contraceptive use affect the risk of IBD development or relapse?

LG A number of studies have tried to answer this question. However, most were population-level studies, which have many confounders because hormonal contraception is widely used in women in general, and IBD is a relatively rare diagnosis. Therefore, many women who participated in these studies often had recall bias or never filled prescriptions for contraceptives, yet were identified in databases as using them. Additionally, previous research has found that menstrual issues often predate an IBD diagnosis. Thus, women might have been using contraception because of painful periods, which were later realized to be a symptom of IBD.

However, there have not been conclusive studies showing that hormonal contraception causes IBD or increases the risk of relapse. One study showed an increase in the risk of surgery in patients who were on hormonal contraception and had significant disease activity. However, many of these women likely were using contraception because they had active disease and were trying to avoid pregnancy or were trying to improve their periods, and active disease puts them at risk for surgery. Many epidemiologic studies do not control for these confounders, so there has not been a study showing true causality between hormonal contraception and IBD diagnosis or relapse. This is important because if women avoid contraception because of theoretical risks, they are at increased risk for having an unintended pregnancy, which can be adversely affected by disease activity.

G&H What follow-up is needed for women with IBD who are using contraception?

LG It is important to check in with these patients on a regular basis to make sure that their contraceptive method is still meeting their needs, especially if a short-acting or barrier method is being used, and to remind patients that there are also other effective options. Patients should know that they can try different contraceptive methods throughout their reproductive lives if they are having difficulty using their current method (eg, if they are experiencing side effects or having trouble remembering to take pills or get prescriptions filled).

If gastroenterologists feel uncomfortable discussing sexual health issues with their patients, it is important

that they find a partner in their community. It is also important to make sure that women with IBD have accurate information regarding both contraception and reproduction. Some women with IBD may choose not to have children because of concerns about heritability or their own health, so they need evidence-based guidance to ensure that they are not basing this decision on myths or poor counseling.

G&H How should IBD patients on contraceptives prepare if they would like to become pregnant?

LG The ideal time to become pregnant is when the patient's IBD is well controlled, as previously mentioned. Thus, IBD patients should meet with their gastroenterologist, primary care doctor, and obstetrician-gynecologist to make sure that their health is optimized before stopping a contraceptive method. Pregnancy planning is important in order to make sure that any changes to the treatment plan occur far enough in advance that the patient's body has time to adjust and the patient can become stable on any new treatments before pregnancy occurs.

G&H What are the next steps in research in terms of contraception in IBD patients?

LG There needs to be improved understanding of barriers to contraceptive access and education. Clinical goals should be to improve reproductive planning and contraceptive education and to ensure that women receive methods that are safe for them. Further research is needed to determine whether hormonal contraception is in any way related to IBD in terms of improvements or relapse. We know that some hormones have effects on the bowel and on receptors in the brain, so having more information on which hormones may improve disease activity could help guide patients regarding which methods could potentially improve disease-related issues.

Dr Gawron has no relevant conflicts of interest to disclose.

Suggested Reading

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