Women’s Health in Inflammatory Bowel Diseases (IBD)

Inflammatory Bowel Diseases, Crohn’s disease and ulcerative colitis (CD & UC) are chronic and typically present in early adulthood. Women with IBD face many gender specific issues with body image, menstruation, sexuality, fertility, pregnancy, mode of delivery, menopause as well as bone health. Disease activity is a major component of IBD that affects these issues. It is important that we as providers proactively discuss women’s health maintenance as well as issues that they face in the context of IBD. Shared decision making should be implemented to address these important issues as well as sexual health, family planning, reproductive counseling, and psychosocial issues so that informed decisions can be made (Feagins & Kane, 2016; Nee & Feuerstein, 2015; Rosenblatt & Kane, 2015; Peppercorn & Mahadevan, 2017).

**Tip #1: Address Sexual Health and Body Image** (Feagins & Kane, 2016; Rosenblatt & Kane, 2015; Mahadevan Friedman, Gawron, & Dubinsky, 2015)

Sexual health in women with IBD is important to address due to the major impact it has on young women in the midst of their reproductive years. An estimated 40-66% of women with IBD report sexual dysfunction when asked by their providers. Sexual dysfunction encompasses predominantly the physical aspect of sexuality, and we often neglect to address the other areas of sexual health. Sexual function can be influenced by multiple factors including depression, anxiety and body image. Disease activity is one of the most important factors affecting sexual function. Active disease with symptoms such as diarrhea, pain, fatigue, or active perianal disease affects feelings of sexual attractiveness and desire and can cause associated discomfort during intercourse. Body image plays an important role in quality of life and sexual function. Dissatisfaction with body image was associated with increased disease activity in IBD patients and was linked to low self-esteem, anxiety, depression, and decrease in sexual satisfaction. Medication side effects, surgical scars and ostomies are major contributors to this problem as well.

**Tip #2: Review menstrual cycle and bowel pattern fluctuation** (Mahadevan Friedman, Gawron, & Dubinsky, 2015; Bharadwaj, Kulkarni & Shen, 2015)

Many aspects of IBD management cross gender lines equally. However, the menstrual cycle is a gender-specific variable that often influences IBD activity and requires specific attention from the healthcare provider. Patients with IBD may have delayed menarche and menstrual cycles may be irregular.

Confirm your patient's awareness of the potential impact of menses on IBD gastrointestinal symptoms, and offer additional help as needed. Bowel pattern fluctuation is common during the menstrual cycle and may produce diarrhea, loose stools, constipation, abdominal cramping and pain. Women with a J-Pouch also report loose stools during their menstrual cycle. In some cases, oral contraception may be needed if symptoms become debilitating (see below regarding risks of hypercoagulability). Avoid NSAIDs for menstrual cramps due to the increased risk of causing a flare.

**Tip #3: Review Human Papilloma Virus (HPV) Screening and Prevention with your patient** (The American College of Obstetricians and Gynecologists (ACOG), 2017; Rungoe, Simonsen, Riis, Frisch, Langholz & Jess, 2015; CDC, 2018).

Women with IBD, especially those who are on immunosuppressants may be at increased risk for cervical dysplasia. Therefore, it is recommended that these patients have regular pap-smears, especially if they have multiple partners. According to recommendations from the American College of Obstetricians and Gynecologists (ACOG), women 21-29 years old should have a pap smear every 3 years, and HPV testing is not recommended. Women 30-65 years old should have a pap smear and HPV testing every 5 years or a pap smear only, every 3 years. Women with IBD who are immunocompromised may require more frequent screening rather than, these routine guidelines. A population-based nationwide cohort study by Rungoe and colleagues found a slightly increased risk for cervical neoplasia among patients with Crohn’s
disease regardless of immunosuppression exposure, suggesting that the disease alone may be associated with this finding.

According to the Center for Disease Control (CDC), HPV vaccines are routinely recommended for adolescents who are 11 or 12 years old. Vaccination is also recommended for females who are 13 to 26 years old.

**Tip #4: Review contraceptive basics** (Matin, Kane, & Feagins, 2016; Mahadevan, Friedman, Gawron, & Dubinsky, 2015)

- Contraceptive methods should be selected by the patient and provider based on their clinical and personal concerns.
- Women with IBD are able to use standard contraception measures.
- IUD can be considered as first-line contraception especially if there is concern for lack of absorption of oral contraceptives, but should be avoided in patients with a history of a rectovaginal fistula.
- Due to potential increased risk of developing venous thromboembolism with IBD, women should avoid estrogen-based contraceptive methods such as oral combination contraception pills, combination hormonal transdermal patches and combined hormonal vaginal rings when possible.
- Patients must avoid smoking if using oral contraceptives due to increased risk for thromboembolic events.
- Counseling should be provided to patients on safe behavioral choices and barrier protection from sexually transmitted diseases.

**Tip #5: Plan for Pregnancy, schedule patient for a preconception visit** (Mahadevan, McConnell, & Chambers, 2017; Kane, 2016; De Lima, Zelinkova, Mulders, & van der Woude, 2016; Mahadevan Friedman, Gawron, & Dubinsky, 2015; Selinger, Eaden, Selby, Jones, Katelaris, Chapman, McDonald, McLaughline, Leong, & Lal, 2012).

- Preconception care is essential
- Prospective studies show that education reduces IBD flares during pregnancy by promoting medication adherence, smoking cessation, and improving outcomes
- Review healthcare maintenance such as surveillance colonoscopy, routine vaccines, baseline labs, folate, iron studies, B12 (CD patients), vitamin D, pap smear
- Increase folate intake, prenatal vitamins, improve nutritional status
- Confirm remission – clinical symptoms and objective findings, e.g., labs (albumin, ESR, CRP, Fe studies), colonoscopy, CTE/MRE, baseline fecal calprotectin.
- Goal is to establish and maintain remission prior to conception
- Communicate with your multidisciplinary team – agree on a treatment plan
- Review medication safety for pregnancy and breastfeeding (PIANO Registry)
- Avoid agents with dibutyl phthalate (DBP) coating when possible
- Discuss risk of children inheriting IBD (one parent with IBD ~6-9%, both parents with IBD ~36%)

**Tip #6: Review fertility and pregnancy** (Kane, 2016; Matin, Kane, & Feagins, 2016; Mahadevan, Friedman, Gawron, & Dubinsky, 2015)

IBD affects women in every age range and is often present by the time a young woman is going through the childbearing years. Pregnancy-related decisions require knowledge that is often lacking, leading to voluntary childlessness in 15-35% of patients. Lack of counseling may lead to lack of adequate
knowledge about conception. Identifying lack of pregnancy-related knowledge and working to fill in the gaps can help reduce the risk of uninformed decision-making.

**Educate your IBD patient regarding controlling active disease prior to pregnancy since this is an important factor in producing a healthy pregnancy—for both mother and baby (Nguyen et al, 2016).**

- A pregnant woman with IBD, compared with age-matched controls is at higher risk for adverse outcomes including spontaneous abortion, preterm birth, low birth weight, and complications of labor and delivery (Toronto Consensus Statement)
- The risk of adverse outcomes increases further with active disease
- Close monitoring by a maternal-fetal medicine specialist is important in order to identify inadequate gestational weight gain, fetal growth, evidence of preterm labor, medication compliance and to discuss mode of delivery.
- Patients who have a J-pouch are at greater risk for infertility due to surgical manipulation in the pelvis and pelvic adhesions

**Tip #7: Review medication safety and dosing recommendations** (Mahadevan, McConnell, & Chambers, 2017)

<table>
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<tr>
<th>Medication</th>
<th>Pregnancy safety</th>
<th>Dosing recommendations</th>
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<tr>
<td>Aminosalicylates</td>
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<tr>
<td>Balsalazide</td>
<td>Low risk</td>
<td>Maintain prepregnancy dose</td>
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<tr>
<td>Mesalamine</td>
<td>Low risk</td>
<td>Switch from Asacol HD to equivalent dose of alternate mesalamine</td>
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<tr>
<td>Sulfasalazine</td>
<td>Low risk</td>
<td>Increase folic acid to 2 mg daily</td>
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<tr>
<td>Immunosuppressors</td>
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<td></td>
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<tr>
<td>Cyclosporine</td>
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<td>Standard dosing</td>
</tr>
<tr>
<td>Methotrexate</td>
<td>Contraindicated: teratogenic, abortifacient</td>
<td>Must stop 3–6 mo before attempting conception</td>
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<tr>
<td>Thiopurines (azathoprine, 6-mercaptopurine)</td>
<td>Low risk in monotherapy</td>
<td>In appropriate patient in deep remission with adequate trough levels, consider stopping thiopurine and continuing biologic</td>
</tr>
<tr>
<td>Tofacitinib Biologics</td>
<td>Limited human data</td>
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<td>Adalimumab</td>
<td>Low risk in monotherapy</td>
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<td>Natalizumab</td>
<td>Low risk in monotherapy</td>
<td>Continue dosing until 4–6 wk before delivery</td>
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<tr>
<td>Ustekinumab</td>
<td>Low risk in monotherapy; limited data</td>
<td>Continue dosing until 0–10 wk before delivery</td>
</tr>
<tr>
<td>Vedolizumab</td>
<td>Low risk in monotherapy; limited data</td>
<td>Same indications as pregnancy</td>
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<tr>
<td>Corticosteroids</td>
<td>Low risk</td>
<td>Use steroid-sparing agents when possible</td>
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<tr>
<td>Budesonide</td>
<td>Moderate risk; possible orofacial cleft (first-trimester exposure), adrenal insufficiency, gestational diabetes, premature rupture of membranes, preterm birth, infant infections</td>
<td></td>
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<tr>
<td>Prednisone</td>
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<tr>
<td>Antibiotics</td>
<td>Low risk Limited data</td>
<td>Preferred antibiotic during pregnancy</td>
</tr>
<tr>
<td>Amoxicillin with clavulanic acid</td>
<td>Low risk, Animal data show anomalies</td>
<td>Short courses for perianal disease</td>
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<tr>
<td>Ciprofloxacin</td>
<td>Low risk</td>
<td>Short courses for perianal disease</td>
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<tr>
<td>Metronidazole</td>
<td>Low risk, Avoid in first trimester; possible risk of cleft lip</td>
<td>Avoid</td>
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<tr>
<td>Rifaximin</td>
<td>Teratogenicity described in animal models</td>
<td></td>
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</tbody>
</table>

**Tip #8: Continue monitoring during pregnancy** (Peppercorn & Mahadevan, 2017; Kane, 2016; Mahadevan, Friedman, Gawron, & Dubinsky, 2015)
• Make sure patient has close follow-up in the office as well as with the maternal a fetal medicine (MFM) provider, especially if they are experiencing any symptoms.
• Check labs, medication levels as needed, and fecal calprotectin since ESR can be elevated during pregnancy and therefore is not accurate.
• Remind your patient that in order to have the best pregnancy outcome, she must adhere to the treatment plan.

**Tip #9: Discuss Mode of Delivery** (Mahadevan, McConnell, & Chambers, 2017; De Lima, Zelinkova, Mulders, van der Woude, 2016; Mahadevan, Friedman, Gawron, & Dubinsky, 2015)

Mode of Delivery should be discussed with the OBGYN in conjunction with the GI provider, especially for patients with a history of perianal disease.

• In general, patients with IBD can have uncomplicated vaginal deliveries if they have not had a history of perianal disease.2
• Patients with active perianal disease and/or open rectovaginal fistula should have a C-section to avoid any complications.2
• A healthy mother with IBD, without perianal disease should be able to have a successful vaginal delivery.2

**Tip #10: Review medication safety with breastfeeding** (Mahadevan, McConnell, & Chambers, 2017; Mahadevan et al, 2015)

• PIANO registry – prospective registry of pregnancy outcomes in women with IBD exposed to immunomodulators and biologic therapy.
• Breastfeeding is safe with most IBD medications (see below).
• Not associated with disease flares.
• Breastfeeding was not associated with infant infection risk or delayed developmental milestone achievement in any of the PIANO registry drug exposure categories.

***LactMed – free online database – information on medications and lactation2
Tip #11: Schedule a postpartum visit (Mahadevan, U, McConnell, & Chambers, 2017; De Lima, Zelinkova, Mulders, & van der Woude, 2016).
- Review patient’s medications and adherence, breast feeding, any other concerns.
- Check labs with Fe studies, medication levels, fecal calprotectin as needed.

Tip #12: Review bone health and supplement as needed (Feagins, & Kane, 2016; Rosenblatt & Kane, 2015; Mahadevan, Friedman, Gawron, & Dubinsky, 2015).
- Corticosteroids and IBD can impact bone health, increasing the risk for osteopenia and osteoporosis, therefore, be sure to supplement calcium and vitamin D as needed
- Vitamin D levels should be checked as necessary
- Bone density scan should be done for IBD patients who have had cumulative exposure to steroids at least 5mg for at least 3 months or longer
- If a patient has osteopenia or osteoporosis, refer to a specialist for further evaluation/treatment.
Resources to share with your patients:

- Pregnancy and IBD Fact Sheet
  http://www.crohnscolitisfoundation.org/resources/pregnancy-and-ibd.html

- The Intimate Relationship of Sex and IBD Facts Sheet
  http://www.crohnscolitisfoundation.org/assets/pdfs/ibdsexuality.pdf

- Facebook live video on women, pregnancy, and IBD:
  https://youtu.be/03JPBsx5deY

- Women and IBD Fact Sheet:
  http://www.crohnscolitisfoundation.org/assets/pdfs/womenfactsheet.pdf

References


