crohn's colitis

IBD During Preconception or Pregnancy Checklist

(including use of advanced therapies during pregnancy)

Objective

To ensure informed family planning.

Regular follow-up during the preconception period and pregnancy to provide education, counselling, and disease optimization to improve materno-fetal outcomes are recommended.

Patient Population

Individuals (male and female) with a known diagnosis of IBD who are of reproductive age.

Highlight Box

Optimization of maternal and neonatal outcomes in IBD begins before conception.

Women should be advised that they should be more concerned about the effect of active inflammation rather than the effects of active medications. Ongoing medical therapy to maintain disease control is paramount. Almost all IBD medications (with the exception of methotrexate and the oral small molecules, that is the JAK inhibitors or S1P modulators) are safe during pregnancy and breast-feeding. A hiatus in therapy is not recommended and individuals should be treated through pregnancy and breastfeeding.

Introduction

Patients with IBD and their health care providers often have questions regarding the interaction of IBD with fertility, pregnancy, breast feeding, and infant health. Although the management of IBD continues to evolve as newer IBD therapies become available, the core discussion points for education/counselling and for IBD management in the preconception or pregnant IBD patient remain consistent. This CCP provides guidance on the key principles to discuss and to implement with your IBD patients in the preconception and pregnancy timepoints.

Consider discussing the following items:

Preconception
Family planning - Does the patient think he/she might want to have children? If the patient does not want to have children, an additional question about the factors leading up to their decision is encouraged as patients may be misinformed about genetic, disease or medication risks.

Risk factors
Modifiable risk factors for good maternal and infant outcomes during pregnancy – Encourage smoking cessation, healthy diet, prenatal multivitamin intake and disease control. Be more concerned about active disease than active medications!

Non-modifiable risk factors for the development of IBD in the infant – genetic risk is considered minor.
Focus on what can be modified!

Fertility
If a patient is in clinical remission, fertility is similar to that of the general population. Active IBD or a history of pelvic surgery (including proctectomy or an ileal pouch anal anastomosis) can decrease fertility.

What you can do!

1. Commence a prenatal multivitamin (containing iron and folate – minimum 0.5mg/day but 2mg/day if on sulfasalazine). Check ferritin, vitamin B12 and vitamin D and provide appropriate supplementation.
2. Evaluate disease activity with clinical assessment, fecal calprotectin +/- endoscopy/imaging to ensure disease remission prior to attempting conception. This is relevant even in asymptomatic individuals as symptoms may not correlate with disease activity.
3. If IBD is controlled, but still unable to conceive after 12 months of active trying, consider referral to a fertility specialist to exclude other causes of subfertility. In women who have a history of extensive pelvic surgery, e.g. an ileoanal pouch anastomosis or proctocolectomy, consider referral to a fertility specialist after 6 months of trying to conceive.

Pregnancy Principles

1. **Effect of IBD on pregnancy**

   It is important to control disease activity to quiescence during pregnancy. Treating-to-target (mucosal healing) – to achieve clinical, biochemical, sonographic, and, endoscopic healing is just as important during pregnancy as in the nonpregnant state.

   Routine lab work should be performed each trimester, consider fecal calprotectin in the 1st and 3rd trimesters (given that this can predict a disease flare 3-6 months ahead, and 3 months = 1 trimester), intestinal ultrasound is an excellent non-invasive tool for disease assessment and can be performed prior to 24 weeks gestation (if later, baby will steal the show and the bowel can't be visualized adequately). Endoscopic evaluation can be considered if it will change patient management, e.g. in an acute flare when an assessment if required before initiating or changing therapy, and/or if biopsies are required to exclude viral superinfection.

   The importance of disease control is evidenced by patients with active disease at time of conception being 7-8 times more likely to flare during pregnancy and 2-3 times more likely to have a preterm birth. Preterm birth characterized by delivery prior to 37 weeks gestation, increases the risk of neurodevelopmental problems and also increases the risk of infection in the infant (due to immaturity of the immune system). It is important to note that it is active disease not active treatment that increases the risk of these adverse maternal fetal outcomes.

2. Effect of pregnancy on IBD

Women with Crohn's disease generally fare well during pregnancy and enter relative disease quiescence, however, the treat to target strategy still applies and appropriate therapy should be continued. Women with ulcerative colitis are at increased risk of a flare during the second and third trimester out to the early postpartum phase, even if they started the pregnancy in remission. Individuals with ulcerative colitis often require supplemental rectal therapy along with existing maintenance medications. As outlined in the 'Effect of IBD on pregnancy' all attempts should be made to maintain disease control throughout pregnancy with medical therapy.

3. Safety of medications during Pregnancy and Breast-feeding

- 5-ASA
  These agents are considered safe during pregnancy and breast-feeding as they have limited systemic absorption. They are effectively topical medications that act on the mucosa. As such they do not have systemic bioavailability and do not impact on the infant, making them safe during pregnancy and breast-feeding.

- Corticosteroids
  Corticosteroids are used to induce but not maintain remission. They may be used for a limited time to effectively treat an active flare during pregnancy or during the lactation phase. As a reminder, these are used as bridging agents and the physician should consider an appropriate maintenance regimen. Long-term data has not shown an increased risk of cleft lip and palate; however use of corticosteroids can be associated with metabolic effects including an increased risk of gestational diabetes. Adverse outcomes including low birthweight and preterm birth reflect the active disease state, highlighting the need for tight disease control for the remainder of the pregnancy. If a woman is breastfeeding while on corticosteroid therapy, there is no need to pump and dump.

- Azathioprine
  Azathioprine is considered safe during pregnancy and breast-feeding as a singular agent. There is a slight increased risk of infection when used as combination therapy. There is no need to pump and dump while breastfeeding in women using azathioprine.

- Biologics
  Biologics are monoclonal antibodies, which are extremely effective and safe medications for the treatment of inflammatory bowel disease. Given their large size, they do not cross the placenta in the first trimester, and therefore are not responsible for congenital deficits. However, steady transfer during the second and third trimester results in detectable drug levels in the infant up to 6 months of age.

  Fortunately, this has not led to an increased risk of neonatal infections as evidenced by a number of research studies. Women who have been exposed to biologic therapies during pregnancy, resulting in their infants being biologic exposed, are able to self-refer or request referral to their local Special Immunization Clinic, run by pediatric infectious disease, though access is location specific. Biologic exposed infants will undergo a clinical assessment, drug level testing, immunophenotyping, and are provided reassurance regarding the provision of non-live vaccinations, which are routine for all infants. Whilst live

vaccinations have generally been withheld in bio-exposed infants for the first 6 months of life, if infants attend for assessment at the special immunization clinic within the first 2-3 months of life, and if immune testing is deemed normal, infants will be advised to proceed with the live oral rotavirus vaccination, allowing them to complete all recommended infant vaccines*. *Special Immunization Clinics liaise with public health. Therefore, this process is subject to change.

It is safe to breastfeed while on biologic therapy, as very small amounts are passed into the breastmilk, and this will be digested by the baby's gastrointestinal system and there is no further blood-blood transfer.

- Methotrexate, JAK inhibitors, Sphingosine-1-phosphate (S1P) modulators
  Oral small molecules, which include Methotrexate, JAK inhibitors and Sphingosine-1-phosphate (S1P) modulators, should generally be avoided in the 6 months prior to pregnancy. Plan should be made to transfer patients to more appropriate therapy given the potential teratogenic risks, and the 6-month time frame allows for women to stabilize on new appropriate therapy. There are a few exceptions in which pregnant woman may continue small molecule therapy if no alternate therapy is available and the woman has exhausted all other IBD therapies, on the premise that it is more important to control active disease. These are exceptional circumstances, and women should be managed by a specialized IBD pregnancy clinic. These drugs should be avoided whilst breastfeeding

4. Obstetric Care in Pregnancy

We recommend women with IBD are followed by an obstetrician with expertise in high-risk pregnancies, or a materno-fetal medicine specialist.

Vaginal delivery is generally recommended in women with IBD. There are only limited contraindications including those with active perianal disease, extensive pelvic surgery or those with an ileal anal pouch anastomosis. Decision regarding mode of delivery is generally based on obstetric considerations including cephalo-pelvic disproportion, breech presentation etc.

Pregnant women who are hospitalised for a disease flare or for caesarean delivery should be provided thromboembolic prophylaxis with heparin.

5. Preventive Care in Pregnancy

This comprises of the following subsections: mental health, vaccinations, nutrition, cancer screening.

- Mental health
  Pregnant and postpartum women are at increased risk of postpartum anxiety and depression. Screening should be undertaken.

- Vaccinations
  All pregnant women should be offered a DTaP [diphtheria tetanus and pertussis] vaccination

at during each pregnancy to confer passive immunity to baby. The Society of Obstetrics and Gynecology Canada [SOGC] recommends a COVID vaccine be provided during each pregnancy along with the seasonal influenza vaccine. All women on biologic therapies are at increased risk of pneumonia and therefore should receive the adult Prevnar and Pneumovax vaccine if product not previously administered.

- Nutrition
  Screening for vitamin D, ferritin, and B12 deficiency and appropriate supplementation should be conducted.

- Cancer screening
  Cancer screening for cervical cancer, skin cancer, colon cancer should be reviewed, and appropriate arrangements made for invasive screening to be performed between pregnancies. Consider referral to a specialised IBD preconception and pregnancy clinic if available in health region or an IBD specialist with interest in women's health.

Other Resources

IBD Parenthood Project The Parenthood Project - My IBD Life (gastro.org)
This provides excellent downloadable handouts for patients.

Crohn's and Colitis Canada https://crohnsandcolitis.ca/Living-with-Crohn-s-Colitis/Fertility-pregnancy

References

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