NYU Langone Health

Pregnancy and the Patient with IBD

Why Is This Topic Important?

- Most patients are diagnosed with IBD between ages 20-40 years, which coincides with childbearing years
- IBD affects men and women equally
- Multidisciplinary care is warranted to achieve the best outcomes
- Many providers and patients are fearful of treatment during pregnancy and lactation
- Worsening disease activity is the greatest predictor of poor pregnancy outcomes for an patient with IBD
- Little evidence for many recommendations, since pregnant women are excluded from trials

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

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Known Risks for the Pregnant Patient with IBD

- Miscarriage
- Growth retardation
- Premature delivery
- Delivery complications
- Disease exacerbation

Planning and the Care Team

Preconception Planning

- Ideal for individuals to be in remission 3-6 months prior to conception to increase likelihood of quiescence during pregnancy and in postpartum period
- Preconception visit is ideal to assess:
  - Disease state
  - Therapy plan
  - Nutritional status
  - Smoking cessation
  - Body weight

Pedersen N et al. *Aliment Pharmacol Ther* 2013;38(5):501-512.
Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

Preconception Planning

- Contraception: long-acting, reversible, and non-hormonal
  - Mindful of venous thromboembolism risk
  - Consider reduced efficacy of oral contraceptive pills with small bowel disease / resection
- Fertility rates in IBD are equivalent to non-IBD patients
- Patients with prior surgery including ileal pouch-anal anastomosis, ostomies, and proctectomy exhibit reduced fertility rates due to inflammation and fallopian tube scarring
- Active inflammation may also reduce fertility
- Increase in voluntary childlessness compared to non-IBD patients

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.
Rajaratnam SG et al. *Int J Colorectal Dis* 2011;26(11):1365-1374.
Wikland M et al. *Int J Colorectal Dis* 1990;5(1):49-52.

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Ideal Care Team Roster

The captains:

1. Gastroenterologist with IBD expertise
2. Maternal-fetal medicine specialist

Access to, as needed:

1. Colorectal surgeon
2. Nutritionist
3. Lactation consultant

With knowledge and understanding of principles for managing IBD during pregnancy, you can manage these patients, too!

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

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Disease Management

Healthcare Maintenance

- Use of prenatal vitamins is recommended, start early
- Iron may cause constipation can be managed with most over-the-counter preparations
- Inadequate gestational weight gain has been tied to increased risk for small-for-gestational age infants born to mothers with IBD

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.
Bengtson MB et al. *Inflamm Bowel Dis* 2017; 23(7):1225-1233.

Medication Options: What Not To Use!

- Steroids for maintenance
  - Best for patients to be in remission off steroids for 3 months before conception
  - May increase the risk of gestational diabetes, preterm birth, and low birthweight
- Methotrexate must be held 3 months before conception, given known teratogenecity
- Limited data for use of tofacitinib during pregnancy; 11 maternal exposures in the >1100 patients in the ulcerative colitis trials; most common outcome was healthy newborn
- Animal studies with tofacitinib have demonstrated fetal malformation at high doses; encouraged to avoid during the first trimester

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.
Mahadaven U et al. *Inflamm Bowel Dis* 2018;24(12):2494-2500.

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Medical Therapy

- 5-ASA agents (oral and topical) may be continued throughout pregnancy
  - All preparations are currently phthalate free
- Thiopurine monotherapy can be continued
  - Increased renal clearance may lower levels
  - Initiation during pregnancy is not recommended
- Steroids can be used as needed for flares
- Biologics can be continued with last dose timed during third trimester, ideally to deliver during trough
- Combination therapy is discouraged if possible, due to concern of infection risk

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

Medical Therapy: Biologics

Drug	
Infliximab	Last infusion 6-10 weeks before delivery; resume postpartum
Adalimumab	Last injection 2-3 weeks before delivery; resume postpartum
Certolizumab	Continue uninterrupted
Golimumab	Last injection 4-6 weeks before delivery; resume postpartum
Vedolizumab	Last infusion 6-10 weeks before delivery; resume postpartum
Ustekinumab	Last infusion 6-10 weeks before delivery; resume postpartum

Can resume biologics 24 hours after vaginal delivery and 48 hours after C-section

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

Disease Activity in Pregnancy: Assessment

- 1/3 of patients will flare during their pregnancy
- Quiescence at the time of conception helps protect again flares
- Assessment of disease with endoscopy or imaging can be considered if findings will alter management
- Lab alterations may be seen in pregnancy including:
  - Anemia
  - Reduced albumin
  - Elevated alk phos

Caprilli R et al. *Gut* 2006;55(Supp 1):i36-i58.
Abhyankar A et al. *Aliment Pharmacol Ther* 2013;38(5):460-466.
Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

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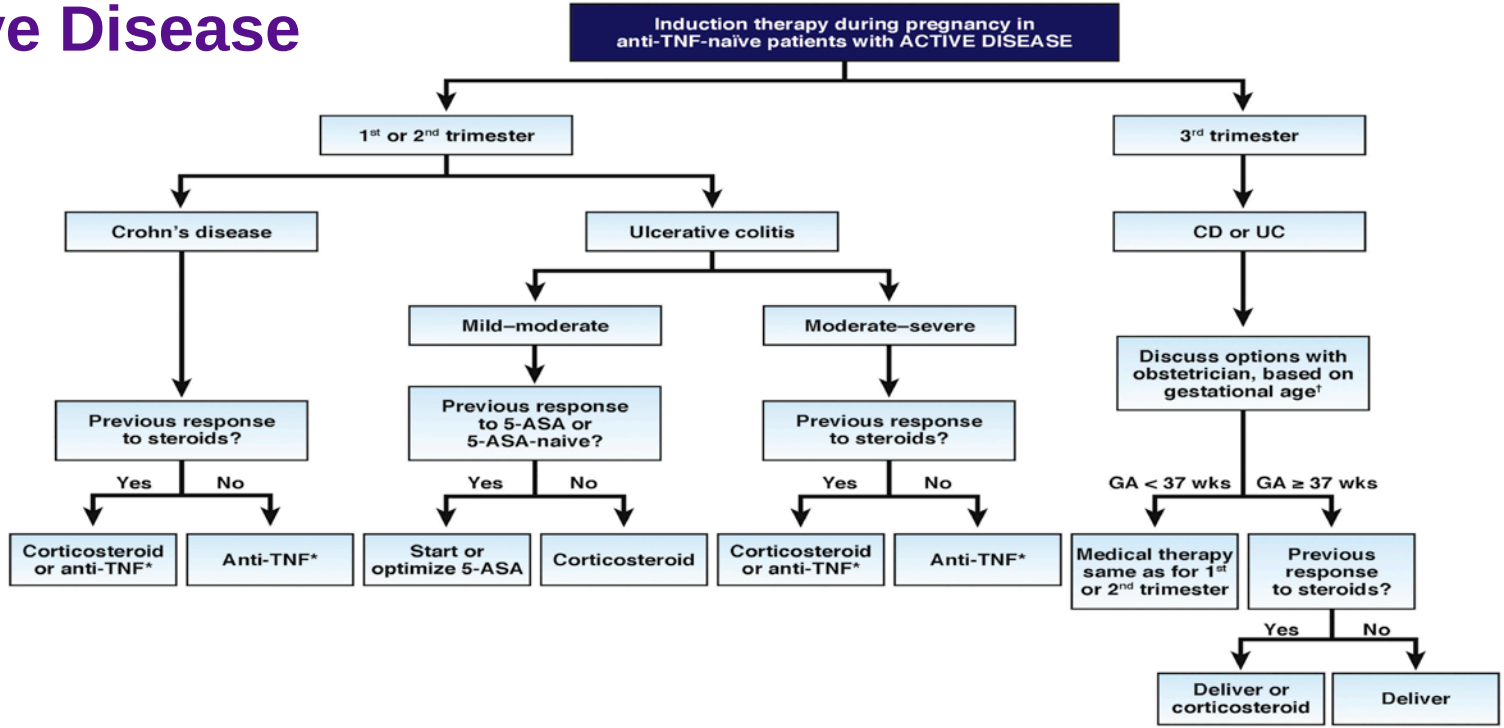
Disease Activity in Pregnancy

- Flexible sigmoidoscopy can be performed (unsedated and unprepped) any time during gestation
- Colonoscopy after 24 weeks' gestation may put the patient and pregnancy at risk
- Gadolinium should be avoided in pregnancy

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

Active Disease



Nguyen GC et al. *Gastroenterology* 2016;150(3):734-757.

Perianal Disease in Pregnancy

- Active perianal disease can be treated with standard of care measures
- Active disease (fistulas, fissures, stenosis) increase the risk of a 4th degree tear 10x
- Thorough perianal exam during 3rd trimester can help determine the best mode of delivery
- Cesarean section is recommend for:
  - Prior rectovaginal fistula
  - Active perianal disease at the time of delivery
  - Special consideration for those with IPAA given need to preserve anal sphinct

Nguyen GC et al. *Gastroenterology* 2016;150(3):734-757.
Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

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After Delivery

Postpartum Needs: Thromboembolic Risk

- IBD patients are at an increased risk for venous thromboembolism, as are pregnant women
- Mechanical prophylaxis and early ambulation are needed for all IBD patients after delivery
- Patients with C-section should be treated with prophylactic anticoagulation after surgery; course may extend up to 3-6 weeks postpartum

Nguyen GC et al. *Gastroenterology* 2014;146(3):835-848.

Postpartum Needs: Pain Management

- Short courses of opioids can be used
- Avoidance of codeine and tramadol
- Avoidance of NSAIDs, if possible
- Consideration of constipation and ileus, caused by pain medications

ACOG Committee Opinion No. 742. *Obstet Gynecol* 2018;132(1):e35-e43.

Recommendations for the Newborn

- Vaccines should be given on schedule
- Any baby exposed to a biologic during the third trimester should NOT be given live vaccines in the first 6 months of life
- Rotavirus delivery is the only impacted vaccine
- Live vaccines indicated at age 1 year (MMR, Varicella) can be given to breastfed babies of mothers taking biologics

Mahadaven U et al. *Gastroenterology* 2019;156(5):1508-1524.

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Resources

For Providers

- Inflammatory Bowel Disease (IBD) in Pregnancy Clinical Care Pathway: A Report from the American Gastroenterological Association IBD Parenthood Project Working Group
- First standardized work flow for providers treating IBD patients through family planning

For Patients

http://www.ibdparenthoodproject.gastro.org/