Participating in the Webinar

Listen using your computer audio. A headset is recommended but not required.

All attendees will be muted and will remain in Listen Only Mode.

Type your questions here so that the moderator can see them. Not all questions will be answered but we will get to as many as possible.

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ACG Virtual Grand Rounds

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Week 4: Hepatitis B: An Update
Nancy S. Reau, MD, FACP
April 16, 2020 at Noon EDT

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Visit gi.org/ACGVGR to Register
Virtual Grand Rounds: 
Update on Pregnancy in IBD

Sunanda Kane, MD, MSPH, FACG
Mayo Clinic Rochester
Clinical Care Pathway

• Multi-disciplinary work group of gastroenterologists, maternal fetal medicine specialists, teratologists, lactation specialty and patient stakeholders
• In conjunction with AGA and Crohn’s and Colitis Foundation
• Published simultaneously in Gastro, Am J OB/Gyne, and IBD journal


Fertility Concerns

• No surgery and in remission fertility rates equal to background population
• Active disease has been associated with decreased fertility
• Voluntary childlessness rate high (17% vs 6%)
• ART not as successful in IBD, likely from lesser chance of achieving a chemical pregnancy
Disease Management

- Common lab values, supplement folic acid
- Steroids are not a maintenance medication!
- Stability on drug regimen for 3 months
- Baseline drug level before conception
- Tofa washout of 1 week before conception
Virtual Grand Rounds

9-month plan

IBD remission

Medication (Table 2)
- Stool softeners as needed
- Appropriate antimicrobials as needed
- Aminosalicylates and thiopurine monotherapy can continue throughout
- Corticosteroids are not maintenance therapy
- Use as indicated for flares
- Biologics should continue throughout pregnancy without interruption
- Can time last dose in trimester 3 to deliver infant at presumed drug trough

Nutrition and weight gain
- Prenatal vitamin
- Iron may worsen abdominal pain
- Trimester 1: check iron/B12 levels
- Adequate folate supplementation
- Monitor gestational weight gain, which can be low in IBD
- Nutrition consult if needed
- Post-surgical changes
  - Short bowel
  - Ostomy
  - Inadequate weight gain
  - Active disease

Maternal/fetal monitoring
- Routine antepartum care
- Trimester 3 fetal growth ultrasound
- Examine perium for evidence of active disease
- Counseling on mode of delivery

Abbreviations used: NST, Nonstress test; BPP, Biophysical profile

Virtual Grand Rounds

9-month plan

IBD flare

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  - Active disease

Maternal/fetal monitoring
- Consider fetal growth surveillance every 2 weeks after 24 weeks
- Recommend antepartum surveillance for patients with active disease in trimester 3
- Recommend ultrasound cervical length screening at 16–20 weeks gestation with follow-up if indicated by short cervix (<25 mm) per usual obstetric indications
- Nutrition counseling
- NST/BPP for usual indications
- Patients on steroids should have early glucose screen
- Counseling on mode of delivery

Abbreviations used: NST, Nonstress test; BPP, Biophysical profile
Delivery Plan

- CS for rectovaginal fistula, active p/a disease
- IPAA case by case basis
- Vaginal delivery does not affect later on risk of development of IBD
- Dosing of biologic after delivery
- If CS anticoagulation prophylaxis

Post-Delivery Care

- Dosing of weight based on pre-pregnancy wt
- Lactation
  - No tofa or MTX
  - Mesalamine over SASP
  - Thiopurines, biologics fine
  - Avoid fenugreek for milk stimulation
  - Pumping and dumping discouraged
Vaccines

- All given on scheduled EXCEPT
- Live virus with in utero biologic exposure
- MMR and varicella are live but given at 1 year and are appropriate

Developmental Milestones

- Normal seen with TP, biologic exposure
- Ages and Stages questionnaire appropriate
- Effect of inflammation in utero on developing brain actively being studied
Effect of Active IBD on Pregnancy

- 2008-14 pregnancies in Rotterdam followed prospectively, 298 in 229 IBD patients
- 226 live births recorded, 9 birth defects
- Active disease at conception associated with disease relapse during pregnancy with aOR 7.66 (3.77-15.54)
- UC patients experienced relapse more often than CD, OR 3.71 (1.86-7.4)
- Active disease in nulliparous women lead to more spontaneous abortion and LBW

De lima-Karagiannis A. Am J Gastroenterol 2016; 111:1305-1312.

Risk of Adverse Pregnancy-related Outcomes

Adherence During Pregnancy

• Women with ≥2 consecutive medications prescription for maintenance therapy in year prior to pregnancy Alberta CA 2012-2015

• 159/230 women adherent during the year prior to pregnancy,
  – 20 (12.6%; 95% CI: 8.2%, 18.8%) not adherent
  – 21 (13.2%; 95% CI: 8.7%, 19.5%) discontinued their medications during pregnancy

Lee S. AP&T Dec 2 2019 Epub ahead of print https://doi.org/10.1111/apt.15596

Adherence During Pregnancy (cont)

• Medication adherence during pregnancy differed by drug class
  – In the first trimester, women more likely adherent to biologics (49.3%, 95% CI 37.3%, 61.3%) than thiopurines (20.9%; 95% CI 12.6%, 32.6%; \( P = 0.014 \)) and 5-aminosalicylates (29.9%; 95% CI 19.9%, 42.1%; \( P = 0.030 \))
  – In the second trimester, adherence pattern did not significantly differ by drug class (biologics vs thiopurines: \( P = 0.348 \); biologics vs 5-aminosalicylate: \( P = 0.999 \))
  – Infants born to women with IBD were more likely to be admitted into the neonatal intensive care unit than the general obstetric population (adherent: RR 1.58, 95% CI 1.02, 2.27; non-adherent: RR 1.32, 95% CI 0.97, 1.81)

Lee S. AP&T Dec 2 2019 Epub ahead of print https://doi.org/10.1111/apt.15596
Fecal Calpro in Pregnancy

- 219 singleton pregnancies in Denmark with moderate to severe disease
  - Inactive 80-120
  - Mild 259-349
  - Mod-severe 778-1277
- Sens 70-80%, spec 66.7-73.3% and PPV 66.7-74.4% when cut off of 200 used


Safety of Colonoscopy in IBD

- Case control of pregnant IBD patients matched to age, meds and disease activity
- 42 women underwent 47 lower GI procedures 2008-2014
- Median birthweight lower in cases but no difference in SA, gestational age, birth defects or APGAR scores

Continuous Use of Anti-TNF During Pregnancy

- French National Health System Database
- 1457 IBD pregnancies exposed to anti TNF
- Outcome a composite score of disease, treatment and pregnancy related complications
- aOR for a maternal complication 1.49 (1.31-1.67), infection 1.31 (1.16-1.97)
- No increased risk after 24 weeks for complication but stopping increased risk for disease flare
- No infection risk in infant to 1 yr
- Authors did not support stopping at beginning of third trimester


Safety of first year vaccination in children born to mothers with IBD and exposed in utero to anti-TNFα agents: a French nationwide population-based cohort

47% had exposure throughout pregnancy

Luu M. Alimentary Pharmacology & Therapeutics 2019; 50, Issue: 11-12, Pages: 1181-1188.
IFX Use After In Utero Exposure

- Maternal use 10 mg/kg q 4-5 wks throughout pregnancy
- Healthy boy with no medical issues until 3 yo
- After 2 courses antibiotics developed diarrhea
- Diagnosed with Crohn’s colitis
- Age 14 started on IFX for refractory disease
- Continues on 10 mg/kg q 5 wks without antibodies out to age 17


Tofacitinib in Pregnancy

- Data from 5 registration trials and post marketing reports
- 11 cases of maternal exposure
- 14 cases paternal
- 4/11 healthy newborns, 11/15 from males
- No neonatal deaths, congenital abnl
- 2 spontaneous Ab (both in women)

Mahadevan U. Inflamm Bowel Dis 2018; Nov 29;24(12):2494-2500.
Vedo Use During Pregnancy

![Graph showing Vedolizumab use across pregnancy trimesters]


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Corticosteroid Use during Pregnancy and Risk of Orofacial Clefts

- No statistically significant increased risk of orofacial clefts associated with the use of corticosteroids:
  - Cleft lip with/without cleft palate, (OR) 1.05 [0.80–1.38]
  - Cleft palate alone, OR 1.23 [0.83–1.82]
  - OR for cleft lip with or without cleft palate associated with the use of dermatologic corticosteroids was 1.45 (95% CI 1.03–2.05)

Hviid et al CMAJ. 2011 April 19; 183(7): 796–804
Biologics in Breast Milk

- Milk collected hr 1,12,24,48 after dosing, up to 168 hrs
- Rates of infection and developmental milestones did not differ between breastfed vs not
- (39% in both)

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</table>

Matro R. Gastroenterol 2018; Sep;155(3):696-704.

IPAA Technique and Infertility

- 890 women surveyed 519 responded (58%)
- Pouch indication UC, CD or FAP from CCF between 1983-2012
- Infertility defined as no conception unprotected sex for 1 year
- 143 open vs 18 laparoscopic
- 65% vs 61% infertility according to survey
- However median time to pregnancy shorter in laparoscopic group 3.5 mo vs 9 mo

Take Home Points

• We teach all our patients the importance of compliance with biologic therapy
  – Risk of antibody formation
  – Risk of attenuated response

• Pregnant women should not be different
  – No increase in the risk of birth defects
  – No increase in infections in newborns
  – Clear risk of increased AE with increased disease activity
    • Postpartum is important too!

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