San Francisco Hep B Free - Bay Area ECHO Notes
February 16, 2021

I. **Didactic Presentation: Perinatal Hepatitis B Management: To Prevent Mother-to-Child Transmission** (Dr. Amy Tang - Director of Immigrant Health, North East Medical Services) - presentation can be found at https://www.sfhepbfree.org/echo-program Password: Echo2020

II. Case Presentation: Dr. Anita Chang, Internist at Asian Health Services

Case Summary

- 36 y/o Chinese woman, born in China, with chronic HBV. eAg negative / eAb positive
- Recent labs (11/2020) showing:
    a. ALT 32
    b. HBV DNA 553,000 IU/ML

While pt persistently meets criteria for treatment (ALT range 19 – 150; HBV DNA range 112,000 – 12,869,590 IU/mL), she previously declined treatment due to concern of being on meds when she conceives children in the future. Pt finally agreed to treatment in 12/2020, and she was started her on tenofovir disoproxil fumarate (TDF/Viread). Given that she is still hesitant about being on meds around the time of pregnancy in the future, ongoing counseling will be needed when she is ready to conceive.

Referencing UpToDate, incidence of birth defects seen in infants of women at baseline is 3%, and in registries of women on antivirals, the rate of birth defects for infants born to women on tenofovir disoproxil fumarate (TDF/Viread) 2.3%.

Clinical questions:

1) What guidelines & resources do you reference for perinatal hep B?
2) How to counsel women of childbearing age who need hep B treatment?
3) How to counsel women who may want to d/c hep B meds when trying to conceive?

Recommendations from Project ECHO panel:
Dr. Anita Chang – Primary Care (Asian Health Services)
Dr. Will Holt - Hepatology (Sutter Health)
Dr. Samuel So – Surgical Oncologist/Founder of Asian Liver Center (Stanford Health)
Dr. Amy Tang – Primary Care (North East Medical Services)
Dr. Frank Trinh – Infectious Disease (San Mateo Medical Center)

Guidelines:

- Follow perinatal HBV guidelines from AASLD Hep B Guidelines, UW Hep B Primary Care Guidance
- Initiating antiviral treatment for women of child bearing age that meet criteria is appropriate. Recommend using TDF. For women with CKD, recommend using TDF with dose reduction for GFR <50.
- Generally recommend she continue antiviral treatment, including throughout her pregnancy.

Counseling recommendations from the panel:

- Ensure the patient is making an informed decision on whether to continue vs. stop antiviral prior to or at the beginning of pregnancy that balances the benefits and risks to her own health and her pregnancy.
- If she chooses to stop treatment when she conceives, there's a significant chance of her HBV DNA exceeding 200,000 IU/mL off antiviral and meeting criteria for treatment to prevent mother-to-child transmission in 3rd trimester of pregnancy. She also has a significant chance of posttreatment flares if she stops antiviral before or after pregnancy given her prior history of flares.
- The focus should be on the patient and her health, and the patient is the ultimate decision maker. If she does choose to stop treatment when trying to conceive, she should stop meds with guidance from PCP, so PCP can monitor closely for flares.
- Given that she is eAg negative but still has high HBV DNA and ALT, she likely has a mutation that puts her at a high risk of HCC/fibrosis progression, so treatment is important.
- Mothers need to be as healthy as possible to conceive a healthy baby and take care of her infant, so it's important that her hep B is well controlled.
- If meds stopped, flares usually occur within the first 6 months. Monitor for flare with ALT (+/- HBV DNA) at 1, 3, and 6 months
- Given high viral load, patient is at high risk of transmitting HBV to a future sexual partner. Counsel regarding disclosing HBV diagnosis to partner, getting partner tested & vaccinated. Recommend condoms until partner's status clarified and they are protected. 36 y/o Chinese woman, born in China, with chronic HBV. eAg negative / eAb positive