**San Francisco Hep B Free - Bay Area ECHO Notes**

**Session 12**

**October 19, 2021**

I. **Didactic Presentation: Hepatitis Delta Virus and Hepatitis B** (Dr. Robert G Gish, Robert G Gish Consultants LLC – Principal, Hepatitis B Foundation - Medical Director)

- presentation can be found at https://www.sfhepbfree.org/echo-program Password: Echo2020

 **Dr. Robert Gish HDV Presentation Notes**

AASLD Guidelines for Testing of Hepatitis D

The 2016 HBV Guidelines recommend testing of HBsAg-positive persons at risk for HDV:

• HIV infection or HCV infection

• Persons who inject drugs

• Men who have sex with men

• Persons with multiple sexual partners or any history of sexually transmitted disease

• Immigrants from areas of high HDV endemicity

• HBsAg-positive patients with low or undetectable HBV DNA but high ALT levels should be considered

If there is any uncertainty regarding the need to test, HDV screening is recommended

**HDV**:

• HDV affects globally nearly 5% of people who have a chronic infection with HBV

• HDV in underdiagnosed

• All HBsAg+ patients should be tested for HDV by antibody testing

• Need rapid test on the global market

• No difference in Genotype in terms of response to interferon but some genotypes not studied

• HDV has poor testing frequency and very low linkage to care

• Best treatment today is Interferon with MVR rate of 20%, this does not define cure of HDV

• Major need for new therapies to result in MVR/SVR/DVR, or 2 log reduction = reset of disease activity

• New therapies with Interferon/Combination

 • Lambda, Lonafarnib, vs Myr, Vs STOP/NAPs vs HBsAg clearance

• Next HBV therapies will have 40% HBsAg loss, new HDV therapies will have a MVR/SVR of 40% with an additional 20% set of patients who will have a “reset” of virus levels by 2 logs

• HDV may survive with other viruses: we must keep looking with HDV PCR testing

Test has high sensitivity and specificity

**Q&A from Attendees:**

Q: What is the natural history of delta hepatitis infection in terms of acute vs. chronic infection?

- If you're acquiring delta and B at the same time, chance of clearing HDV (delta) is 90-95% and chance of clearing HBV is in the 80% range

- If already chronically infected with HBV and exposed to HDV, chance of clearing HDV is 30-40% (60-70% of chronic HDC superinfection)

Q: What are indications for delta hepatitis treatment? Does everyone with detectable RNA get treatment? Do you treat with HBV nuc at the same time?

- If some level of fibrosis and detectable delta RNA then should start interferon, however need to talk about the risks benefits and all side effects associated interferon (there are many)

- Should also treat with HBV Nuc at the same time.

**II. Case Presentation: Dr. Ruth Kwong - North East Medical Services**

**Case Summary**

* 63 yo Chinese male, born in US
* Dx hep 10 yrs ago
* Meds: tenofovir AF 25 mg qd
* Elevated ferritin 1,000s attributed to HBV antiviral by GI? W/u for hemochromatosis in gray area.

Clinical questions:

1. If the patient is HBsAg neg and HDV Ab positive, does he need treatment?
2. Patient seroconverted to HBsAg, unclear when this happened but first HBsAg checked at NEMS negative. Should he remain on Vemlidy or can he come off his antiviral?
3. Is the ferritin elevation related to tenofovir or liver disease acute phase reactant? Or does he need a hematology referral?

**Recommendations from Project ECHO panel:**

*Dr. Amy Tang – Primary Care (North East Medical Services)*

*Dr. Will Holt - Hepatology (Sutter Health)*

*Dr. Frank Trinh – Infectious Disease (San Mateo Medical Center)*

*Dr. Anita Chang – Primary Care (Asian Health Services)*

1. Q: If the patient is HBsAg neg and HDV Ab positive, does he need treatment?

- Follow-up HDV RNA, likely negative given pattern of ALT and HBV DNA and F0-1 no to minimal fibrosis.

1. Q: Patient seroconverted to HBsAg, unclear when this happened but first HBsAg checked at NEMS negative. Should he remain on Vemlidy or can he come off his antiviral?
* Consider repeating his Fibroscan first to see if still F0-1 no to minimal fibrosis. If HDV RNA negative, then recheck HBsAg every 6 months for a year and if still negative and HBV DNA undetectable, then trial him off antiviral, can repeat HBsAg with ALT/HBV DNA q6mo for 1y then stop monitoring.
1. Q: Is the ferritin elevation related to tenofovir or liver disease acute phase reactant? Or does he need a hematology referral?
* Likely acute phase reactant but can get hematology referral since genetic test and MRI suggests possible hemochromatosis