

**Case**

# Woman with HIV/HBV/HCV

- 50 year woman with past IDU and high risk sexual intercourse with HIV and HBV
  - HIV – is well controlled on Darunavir/ritonavir + Tenofovir/Emtricitabine (first regimen)
  - HBV – HBeAg +, HBsAg + and HBV DNA 20,000 IU/mL despite dual NRTIs
  - HCV – genotype 1/subtype A, HCV RNA 1,200,000
- Liver biopsy – Stage 3 fibrosis and active inflammation + HBcAg detected
- Did she need a biopsy?

# How would you treat her HBV?

- Improve adherence and monitor
- Add another nucleoside analogue for HBV
  - Entecavir
- Add peginterferon

# Woman with HIV/HBV/HCV

- She agrees to take peginterferon and confirms that she is adherent
- Add peginterferon 180 mcg SC weekly directly administered
- How long would you administer peginterferon for HBV?

# How would you treat her HCV?

- Improve adherence and monitor
- Add SOF/RBV
- Add SOF/DCV
- Add SOF/LDV
- Add ombitasvir/paritaprevir/ritonavir + dasabuvir +ribavirin

# Woman with HIV/HBV/HCV

- She is given SOF/LDV
  - Daclatasvir is not available
- What would you do with her HIV regimen
  - DRVr + TDF/FTC
- How long would you treat with SOF/LDV?
  - 8, 12, 24?
- Would you add ribavirin?

# Woman with HIV/HBV/HCV

- She switches her ART to Dolutegrevir + TDF/FTC and continues to have an undetectable HIV RNA after 4 weeks
- She starts LDV/SOF one tablet daily
- How long would you treat?

# Woman with HIV/HBV/HCV

- She takes 12 weeks of SOF/LDV and achieves SVR
- HBV – she continue peginterferon for a planned 48 weeks
  - HBV DNA is ~ 1,200 IU/mL on peginteron
- If she has side effects, would you stop after 24 weeks?



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# Woman with HIV/HBV/HCV

- She stops after 24 weeks of peginterferon
- After stopping – she remains HBeAg + and has an HBV DNA ~ 5000 IU/mL
- What would you do next?
  - Monitor HBV?
  - Add Entecavir?

# Woman with HIV/HBV/HCV

- She is monitored for HBV on ART with TDF/FTC
- ALT = 30- 40 U/mL and HBV DNA 1,000 – 4,000 IU/mL range
- How often would you monitor?
- How would you monitor?

**Case**

# Man with elevated liver enzymes

- 45 year old man with HIV – controlled on RAL + TDF/FTC
  - He is in a stable relationship with his long-term male partner
- History of IDU at age 18 and is known to be HCV antibody + and HCV RNA negative (multiple checks)
- His ALT is 14 IU/mL; HIV RNA ↓ 20 copies/mL
- How often would you monitor HCV RNA?

# Man with elevated liver enzymes

- He present in January with ALT 845 IU/mL
- On history, he has a break-up with his long-term partners and goes on a “binge” which includes lots of alcohol and unprotected anal receptive intercourse
- How would you work up this patient?

# Man with elevated liver enzymes

- He stop drinking alcohol
- HCV RNA is + at 54,000 IU/mL
- His risk period was as long ago as 6 months (last ALT of 14 U/mL) and one month ago?
- He cleared previously – would you wait?  
Order an IL28B test?

# Man with elevated liver enzymes

- He is IL28B CT and now HIV + (had likely been negative with his first)
- He remains HCV RNA + at 55,000 IU/ml
- How would you treat? Watch? HCV treatment?



# Man with elevated liver enzymes

- How would you treat?
  - PegIFN/RBV?
  - PegIFN/RBV/SOF
  - SOF/RBV
  - SOF/LDV
  - SOF/DCV
  - OPrD

# Man with elevated liver enzymes

- He took LDV/SOF
- How long?
  - 8, 12, or 24 week

# Man with elevated liver enzymes

- He was treated for 12 weeks and achieved SVR
- Now, what?
- HCV RNA – how often? ALT only?