HCV Treatment Monitoring and Post Treatment Surveillance
Objective

At the end of this lecture, the learner will be able to:

- Monitor HCV treatment as per guideline recommendations
- Recommend appropriate long-term care of liver disease subsequent to HCV sustained virologic response
MONITORING PATIENTS WHO ARE STARTING HEPATITIS C TREATMENT, ARE ON TREATMENT, OR HAVE COMPLETED THERAPY
Other Resources

1. Hepatitis C Online
   • https://www.hepatitisc.uw.edu/
2. Clinical Care Options® Hepatitis
3. IDSA Hepatitis C Knowledge Network Webinar
Outline

- On-Treatment Monitoring
- Post-SVR Surveillance
Evaluation Prior to Treatment

- Workup prior to treatment initiation should have included:
  - Baseline labs including CBC with diff and CMP
    - PT/INR at baseline and if patient has advanced fibrosis
    - TSH if using interferon
  - HCV viral load and genotype
  - Staging
  - Assessment of drug-drug interactions
  - Pregnancy testing
  - Resistance testing (if previously treated or using certain medications)
Anticipated Treatment Course

HCV RNA Monitoring in Patients Receiving Antiviral Therapy

- Baseline
- Treatment Period
- Follow-Up

HCV RNA (IU/ml)

10,000,000
1,000,000
100,000
10,000
100
10

Treatment Week
Suggested Lab Assessment

- Week 2
  - CBC with diff if using ribavirin

- Week 4
  - CBC with diff + CMP + HCV RNA PCR

- Week 8
  - CBC with diff if using ribavirin
  - CMP if using Elbasvir/Grazoprevir

- Week 12
  - HCV RNA PCR alone if concluding treatment
  - CBC with diff + CMP + HCV RNA PCR if continuing therapy for >12 weeks

- Week 16 and/or 24
  - CBC with diff if using ribavirin

- Week 24
  - HCV RNA PCR

"More frequent assessment for drug-related toxic effects (eg, CBC for patients receiving ribavirin) is recommended as clinically indicated."
Stopping Rules

- At Week 4 (Or Any Other Time When Noted):
  - LFTs >10x above the upper limit of normal = STOP
  - LFTs <10x without symptoms = repeat labs @ week 6 and 8
  - LFTs <10X with symptoms or other lab abnormalities = STOP
  - Symptoms include weakness, nausea, vomiting, jaundice
  - Labs include significant increase in bilirubin, alk phos, INR
What If It Is Not Working?

- **Persistent Viremia at Week 4**
  - Almost all non-cirrhotic patients should be undetectable at week 4
  - If not, consider compliance and/or drug-drug interaction
  - Repeat at week 6
    - If undetectable, continue as scheduled
    - If HCV viral load >10X increase (1 log) = STOP
    - If improved but still detectable, repeat labs at week 8

- **Failure to clear during or after treatment**
  - Monitor for liver injury
  - Await retreatment “when alternative treatments are available”
  - No clear role for resistance testing
Key Dates In Monitoring for SVR
In-Person vs. Virtual vs. Phone

- “Frequency and type of contact are variable, but need to be sufficient to assess patient safety and response to treatment.”
- Our practice has been to supplement/replace provider in-person appointments with pharmacy virtual or phone follow-up for side-effect monitoring and adherence counseling.
After Sustained Virologic Response ≥12 Weeks After Therapy

1. Counseling
   - HCV antibody will remain positive lifelong
   - Reinfection is possible
   - Future testing will require HCV RNA PCR or similar test

2. Need for Follow-Up
   - F0-2 = “As if they were never infected”
   - F3-4
     - HCC screening with ultrasound every 6 months, CT abdomen with triple phase contrast annually, or MRI abdomen with contrast annually
     - GI/Hepatology referral for endoscopy
Areas of Uncertainty

- Nonspecific staging  
  - I.e. F2-F3 on acoustic radiation force impulse
- Specialty provider access  
  - Primary care vs. GI/hepatology for long-term fibrosis monitoring
QUESTIONS?