**HCV Outline for Primary Care Providers**

**Adapted from SSTAR, Fall River**

Pre-treatment

* Antibody based screening recommended for all health center patients over 18yo regardless of reported risk factors
* Reflex testing with RNA PCR viral load with reflex to genotype
* 1/5 people will self-clear hepatitis C – usually 3-6 months
* Risk factor assessment – good to have a plan but abstinence not required to get health insurer approval of medication and there is data that people with ongoing or intermittent injection practices do similarly well to non-PWID
* Hepatic fibrosis staging: *(The Metavir score is the most used method of quantifying the degree of liver fibrosis. Fibrosis is considered significant when it reaches stage F2 or greater. Metavir scores: F0=no fibrosis; F1=portal fibrosis without septa; F2=portal fibrosis with few septa; F3=numerous septa without cirrhosis; F4=cirrhosis*)
  + Fibrosure is our standard at the clinic (proprietary algorithm of biomarkers ~$600)
  + Transient Elastography (TE) with Fibroscan is better but offsite
  + Easy estimation (and cross-checking) with free algorithms using data you probably already have (AST, ALT, platelets, age)
    - APRI (AST-to-Platelet Ratio Index)
    - FIB-4 (Fibrosis-4)
    - AST correlates more with fibrosis than ALT
  + Could this pt have cirrhosis?
    - Any ascites, splenomegaly, varices?
    - Patients with cirrhosis should work with a hepatologist
  + Metavir F3-4
    - Screen these patients for any concomitant liver disorders
    - Need hepatocellular carcinoma screening every 6 months
      * RUQ ultrasound
      * Serum alpha-fetoprotein (AFP)
* Heptatitis B
  + There are reports of reactivation of HBV during treatment
  + Some cases even of fulminant liver failure
  + Monitoring during therapy helps mitigate this risk
  + Some patients need to start HBV treatment first
* HIV coinfection
* Pregnancy and breastfeeding are contraindications to therapy
  + 5% risk of transmission to child for active/chronic infections

Pre-treatment checklist (all within 12mo to get meds approved)

* HCV Genotype and viral load
* Fibrosis staging
* HIV testing
* HBV serologies – minimum HBV surface antigen and antibody, I recommend HBV core as well
* HAV IgG
* Fibrosure or other fibrosis staging (transient elastography)
* For F3-4 need ultrasound
* If we suspect cirrhosis please send straight to hepatologist

Treatment

* When treatment is selected appropriately and taken reliably, cure rates are 95-100%
* Medications are selected based on genotype, fibrosis, potential drug interactions, and a few other factors
  + HIV infection, viral load, can factor in
* Major drug interactions
  + Antacids, multivitamins and prenatal vitamins, divalent cations (Al, Mg, Fe)
  + Oxcarbazepine and carbamazepine
* Most patients are treated with one of 3 regimens, now all have generics available
  + Glecaprevir/Pibrentasvir (Mavyret)
  + Ledipasvir/Sofosbuvir (Harvoni)
  + Sofosbuvir/Velpatasvir (Epclusa)
  + Occasionally a different regimen is needed for patients who have been treated before
* All of these regimens are 1-3 pills, once a day, for 8-12 weeks
* We send requests through a specialty pharmacy, and when approved they call the pt and approve delivery to 400 Stanley St and the patient comes in for a visit to pick up the meds.
* Side effects occur in about 20% of patients. Not apparently associated with danger.
  + Fatigue or malaise
  + Nausea, loss of appetite. Rarely vomiting
  + Headaches
  + Usually fade after the first couple weeks of therapy
  + Any other side effects would warrant careful evaluation

After treatment

* Test of cure with RNA PCR viral load 12 weeks after completion
  + Called Sustained Virologic Response at 12 weeks (SVR12)
  + HCV nucleic acid residues remain in the liver cells for life but do not reproduce
* Patients with advanced fibrosis need HCC screening with ultrasound and AFP
  + every 6 months, lifelong
* Reinfection in up to 5% of cases in real-world settings
  + Repeat screening based on any new or ongoing risk factors
  + Use the RNA PCR to screen

HCV consult HPI phrase:

Date of diagnosis:

Prior treatment:

Risk Factors:

Alcohol use:

Other known Liver Disease:

OTC vitamins, supplements, or antacids:

HCV consult plan phrase 1:

Acute/Chronic HCV infection with genotype \*\*\*

Treatment naïve/experienced

Metavir Fibrosis stage:

Drug interactions predicted:

Risk factors mitigated?

Hepatitis B status:

Hepatitis B immune?

HIV status:

Hepatitis A immune?

Pending further testing \*\*\* pt is ready to move forward with treatment, likely with \*\*\* for \*\*\* weeks

HCV consult plan phrase 2:

- pt interested in therapy for HCV and would like to move forward with workup and treatment.

- oriented to treatment course, expectation of SVR (cure) 95-100%, and risk of reinfection after cure

- reviewed potential side effects

- counseled on possibility of re-infection with new exposures after SVR (cure)

- Pt counseled on critical importance of regular f/u, labs, and medication adherence to maximize opportunity for cure.

HCV start phrase:

Starting treatment with \*\*\* today

take once daily (with meals for Mavyret)

reviewed potential side effects, call with any worries or concerns

maintain high level adherence

f/u in 4 weeks for refill, checkup, labs