Northwest Portland Area
Indian Health Board
Indian Leadership for Indian Health

Long-Term Follow Up After HCV Treatment

Paulina Deming, PharmD, PhC
Assoc. Professor of Pharmacy
University of New Mexico Health Sciences Center

February 2024

Presentation prepared by: *PD*
Date prepared:

Conflict of Interest Disclosure Statement

No relevant conflicts of interest

1. Describe the follow-up needed for patients with or without cirrhosis who complete HCV treatment

Recommended Follow-Up for Patients Who Do Not Have Cirrhosis

- Patients who do not have advanced fibrosis (patients who have F0, F1, F2):
  - Follow up is same as if they never had HCV

Natural History of HCV Infections

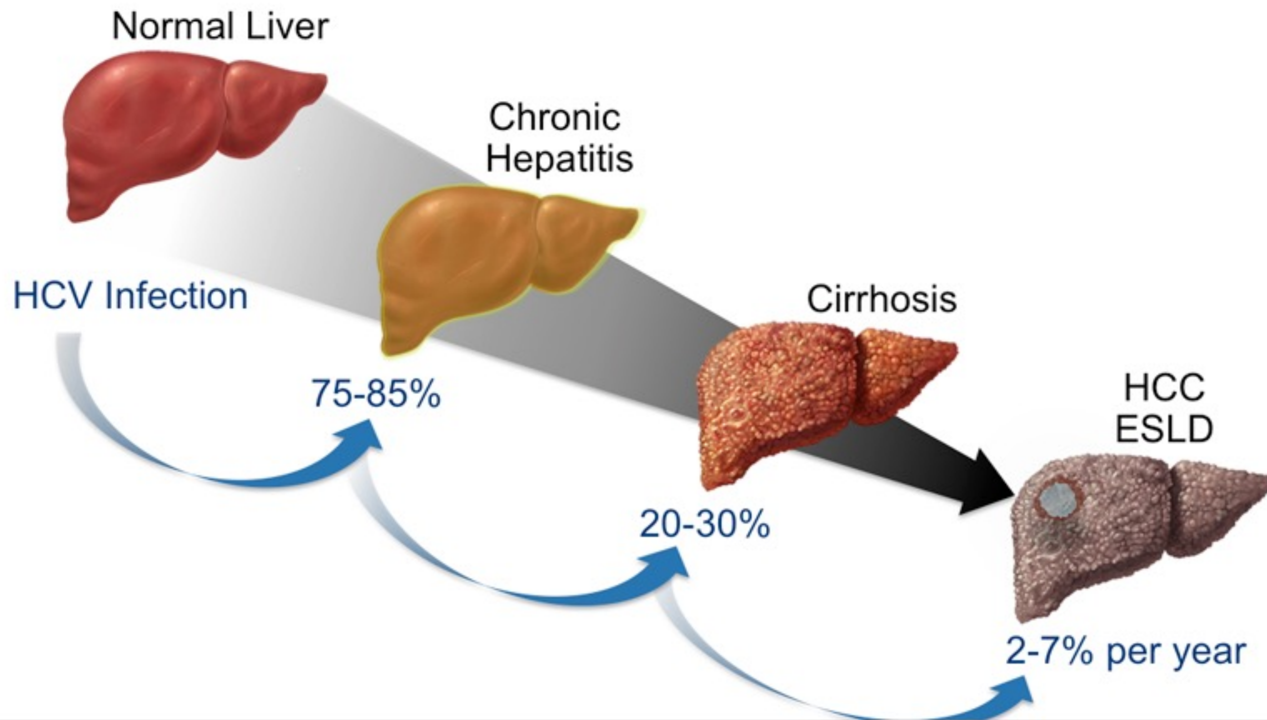


Figure 3 - Natural History Following Initial Infection with HCV
Following initial infection with HCV, approximately 75 to 85% of persons develop chronic infection. Among those with chronic infection, approximately 20 to 30% will eventually develop cirrhosis. Patients who have HCV-related cirrhosis have a 2 to 7% per year risk of developing either end-stage liver disease or hepatocellular carcinoma. Abbreviations: ESLD = end stage liver disease HCC = hepatocellular carcinoma

Recommended Follow-Up for Patients with Advanced Fibrosis/Cirrhosis

- Baseline endoscopy to screen for varices if patient has cirrhosis
- Surveillance for hepatocellular carcinoma recommended every 6 months
  - Alpha-fetal protein (AFP) and
  - Abdominal ultrasound
- **Surveillance continues indefinitely**

Difference in Survival with HCC Screening

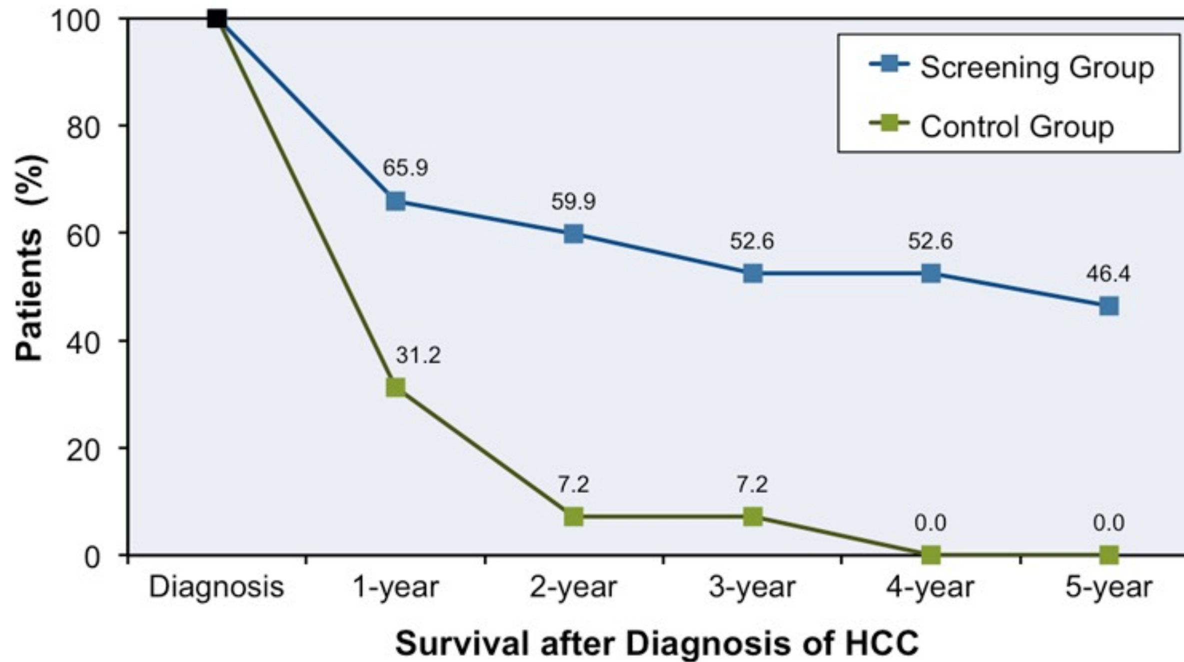


Figure 6 - Impact of Screening on Survival after Diagnosis of HCC
In this trial, patients with chronic viral hepatitis who underwent screening for HCC had improved survival after the diagnosis of HCC when compared with the control group that did not receive screening for HCC.

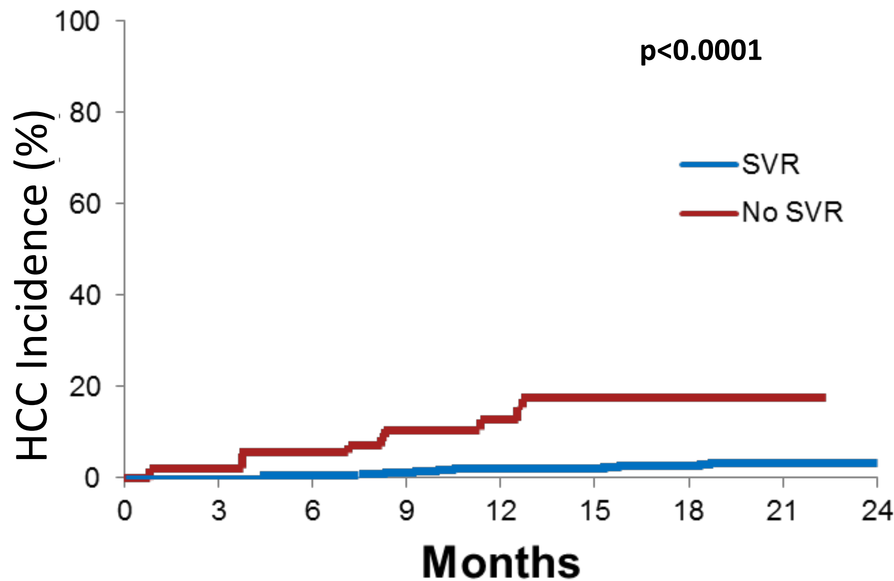
Source: Zhang BH, Yang BH, Tang ZY. Randomized controlled trial of screening for hepatocellular carcinoma. J Cancer Res Clin Oncol. 2004;130:417-22.

SVR and Impact on Hepatocellular Carcinoma

Multicenter, prospective cohort of 1927 HCV-infected cirrhotic patients from Italy

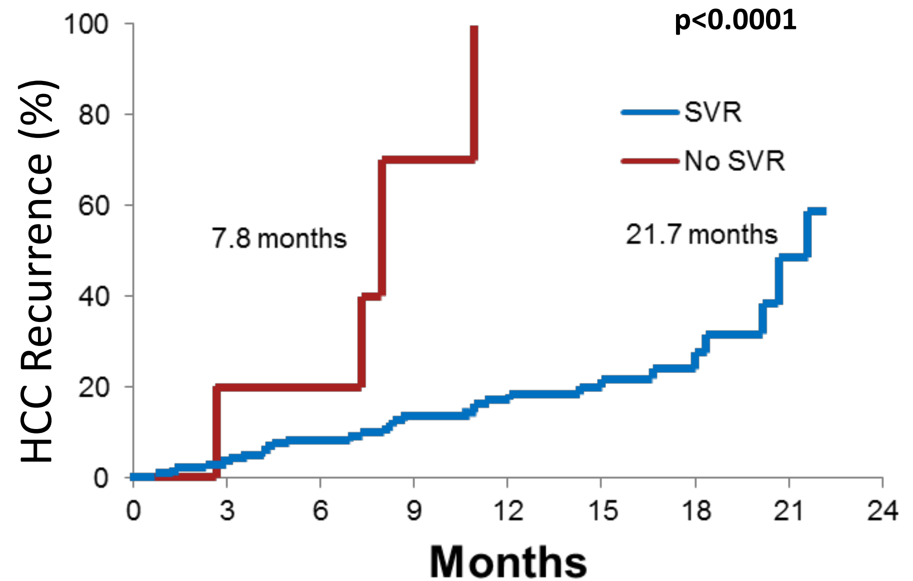
De Novo HCC

1766 patients no previous history of HCC;
50 patients developed HCC (50/1766 – 2.8%);
Average annual incidence of 2.4%



HCC Recurrence

161 patients with previously treated HCC; 38 patients developed HCC;
average annual incidence of 24.8%



SVR with DAA regimens is associated with a significant reduction of incidence and recurrence of HCC

Lleo, EASL 2018, SAT-PS-154

When Should Patients be Retested for HCV?

- If the patient has on-going risk factors for HCV infection
- If otherwise unexplained hepatic dysfunction develops

- What test should be used?
  - HCV RNA
  - *Remember: HCV Antibody will continue to be positive in patients who are cured of HCV*

What About Patients With Persistently Abnormal Liver Enzymes?

- In patients with SVR with persistently elevated liver enzymes, consider other causes of liver disease:
  - Hepatitis B
  - Obesity
  - Autoimmune
  - Alcohol
  - Hemochromatosis
  - Medications
  - Illicit substances

Important Counseling Points for Patients Post-HCV Treatment

- Avoid reinfection
  - ***There is no protection against HCV reinfection with HCV Antibody***
- Develop/maintain healthy lifestyle
  - Maintain healthy weight
  - Minimize/avoid alcohol use
  - Stop smoking

What About Medications in Patients with Cirrhosis?

- Avoid NSAIDS
- Avoid ACE-I
- Avoid aminoglycosides
- Use with caution: furosemide
  - Over-diuresis can potentiate renal injury
  - Electrolyte abnormalities can worsen hepatic encephalopathy
- Ok to use:
  - Acetaminophen preferred for short-term use at reduced doses (<2 grams per day)
  - Statins
  - Metformin

Benefits of Statins in Liver Disease

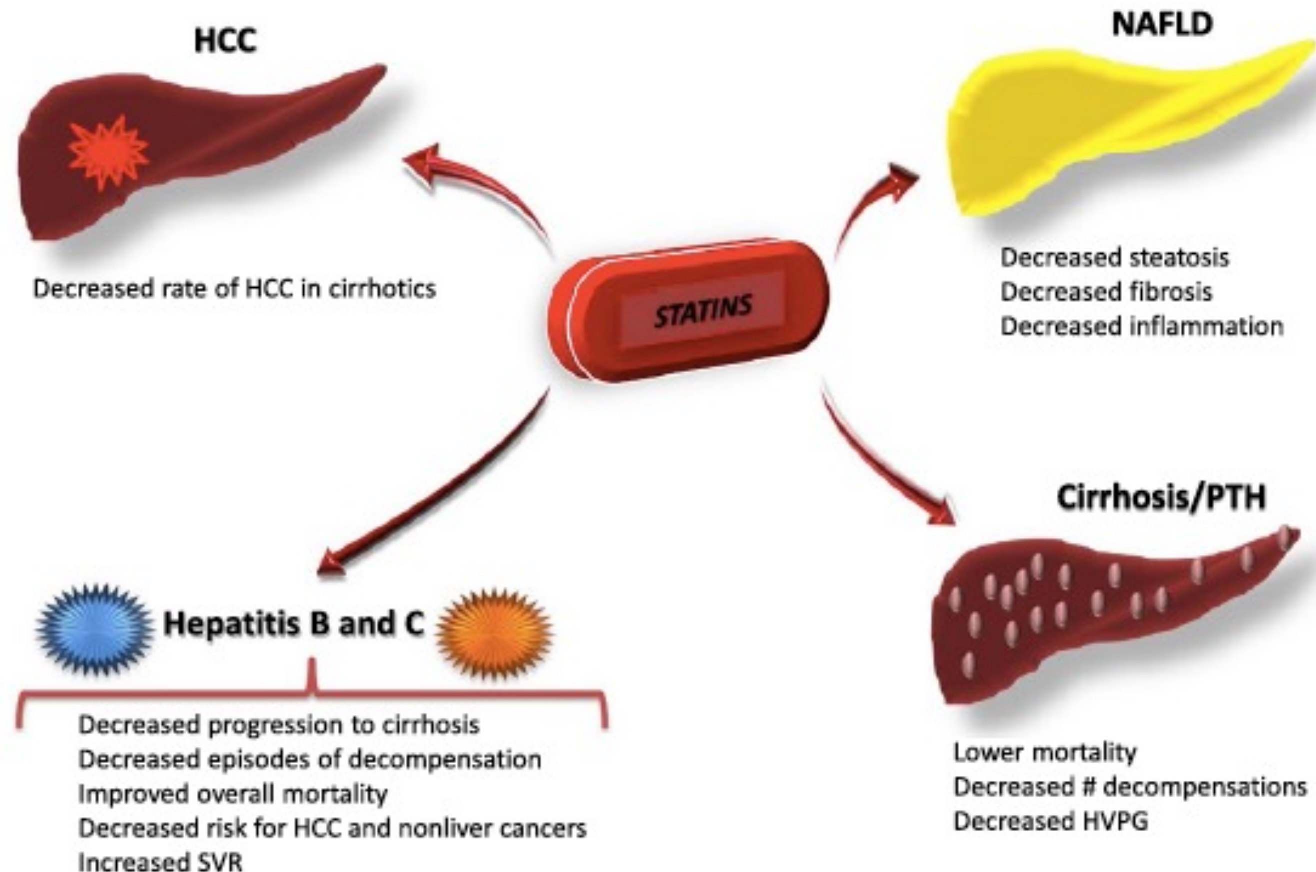


FIG 1 Clinical evidence of the benefit of statin use in chronic liver disease.

Kasia C and Scaglione S. Clin Liver Disease; 2019:106-109

Metformin and Statins in Liver Disease: Chemopreventive Effects

- 2,779 patients with HCV
  - 480 developed HCC
  - 238 died after DAA therapy
- 5 year cumulative HCC incidence significantly higher in patients with DM (16.5%) and no metformin use compared to patients without DM (11.3%) or with DM and with metformin (3.1%)
  - Effect observed mainly in non-cirrhotic patients
- Statin use reduced risk of HCC
  - 3.8% vs 12.5% 5-year cumulative HCC incidence
  - Effect observed with or without cirrhosis

M-L Yu et al. Poster 1814-A. AASLD 2023.

Key Points

- Patients who do not have advanced fibrosis or cirrhosis do not require any special follow up after achieving HCV cure (SVR)
- Unless patients have risks for reinfection, no need for repeat HCV RNA testing ***SVR=CURE***
- Patients with advanced fibrosis/cirrhosis need
  - Follow-up and management for their liver disease
  - On-going HCC surveillance every 6 months indefinitely
- Counsel patients on lifestyle changes to improve liver health and prevent reinfection
  - Patients with cirrhosis should avoid NSAIDs
- Do not be afraid to use statins or metformin in patients with cirrhosis

Indian Country ECHO HCV

End of Presentation

Questions?

Northwest Portland Area
Indian Health Board
Indian Leadership for Indian Health