



# Acute HCV Management

## Importance of predictors to SVC

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# TO WAIT OR TO TREAT EARLY?

While studies have shown that treatment during the acute phase can achieve high (72%–98%) success rates, the optimal regimen and timing of treatment are still a matter of debate.

*Wedemeyer et al. Hepatology, 2003*

# TO WAIT OR TO TREAT EARLY ?

One crucial issue that remains to be resolved is whether physicians should treat all patients diagnosed with acute hepatitis C, or should wait and treat only those who failed to clear the virus in the first few months after infection.

# Spontaneous Viral Clearance(SVC) for Acute HCV is High& Justifies Treatment Delay

- 60 patients with acute HCV (36 genotype 1) followed
  - Spontaneous clearance is **52%** of 51 **symptomatic** cases
    - **No asymptomatic** patient cleared virus
  - SVR achieved in 81% of symptomatic patients without spontaneous clearance who were treated > 3 mos after symptom onset with IFN ± RBV.

# Wait for SVC (Advantages& Drawbacks)

- Although waiting for SVC has the **advantage** of avoiding the treatment side effects and reducing the cost, yet, it has some **drawbacks**.
  - Patients may be lost during follow-up.
  - Some patients have an atypical pattern of viremia, with transient non detection of viremia in the first six months after onset of symptoms.

*Sharaf et al. PLoS ONE, 2008.*

# Summary of AASLD recommendations

- Patients with acute HCV should be considered for IFN-based therapy.
- Treatment can be delayed 8-12 weeks after acute onset to allow for spontaneous resolution.
- Although standard IFN monotherapy effective in this population, peg-IFN can be considered due to greater ease of administration.
- No definitive recommendation about optimal duration of treatment for acute hepatitis C; however, it is reasonable to treat for  $\geq 12$  weeks, and 24 weeks may be considered



# **FACTORS THAT MAY AFFECT SVC**

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## Source of infection:

- In post-transfusion aHCV, the rate of SVC is around 25%
- In non-post-transfusion cases, it varies from 11–14% .

*Seef et al. Hepatology, 2001.*

# FACTORS THAT MAY AFFECT SVC

## Symptomatic patients

- Patients with jaundice or marked elevation of transaminases seem more prone to recover spontaneously than asymptomatic ones with percentages of spontaneous recovery up to 50%.

*Gerlach et al. Gastroenterology, 2003.*

# FACTORS THAT MAY AFFECT SVC

## Ethnicity:

- White populations are more commonly clearing the virus than other races.

## Age:

- Younger patients have a better chance to clear the virus spontaneously.

## Gender:

- Women were found more prone to SVC than men.

*Yamakawa Y et al. J Viral Hepat, 1996*

*Vogt M et al. N Engl J Med, 1999*

*Villano SA et al. Hepatology, 1999.*

# Higher clearance of HCV infection in females compared to males.

- An Egyptian study included 4720 residents .
- Overall HCV antibody prevalence was 19.3% .
- Of those with HCV antibodies (n=910), 61.5% had chronic HCV infection.
- Compared to males, females were more likely to have cleared the virus (44.6% versus 33.7%, respectively, P = 0.001). Control for confounding factors did not alter the positive association between female gender and viral clearance

Bakr et al ,Gut,2006

# FACTORS THAT MAY AFFECT SVC

## HLA typing

- Patients with HLA II alleles are more commonly clearing the virus than other races.

## Specific CD4

- The strength and pattern of HCV-specific CD4 cell responses may predict SVC.

Thursz et al. Lancet 1999

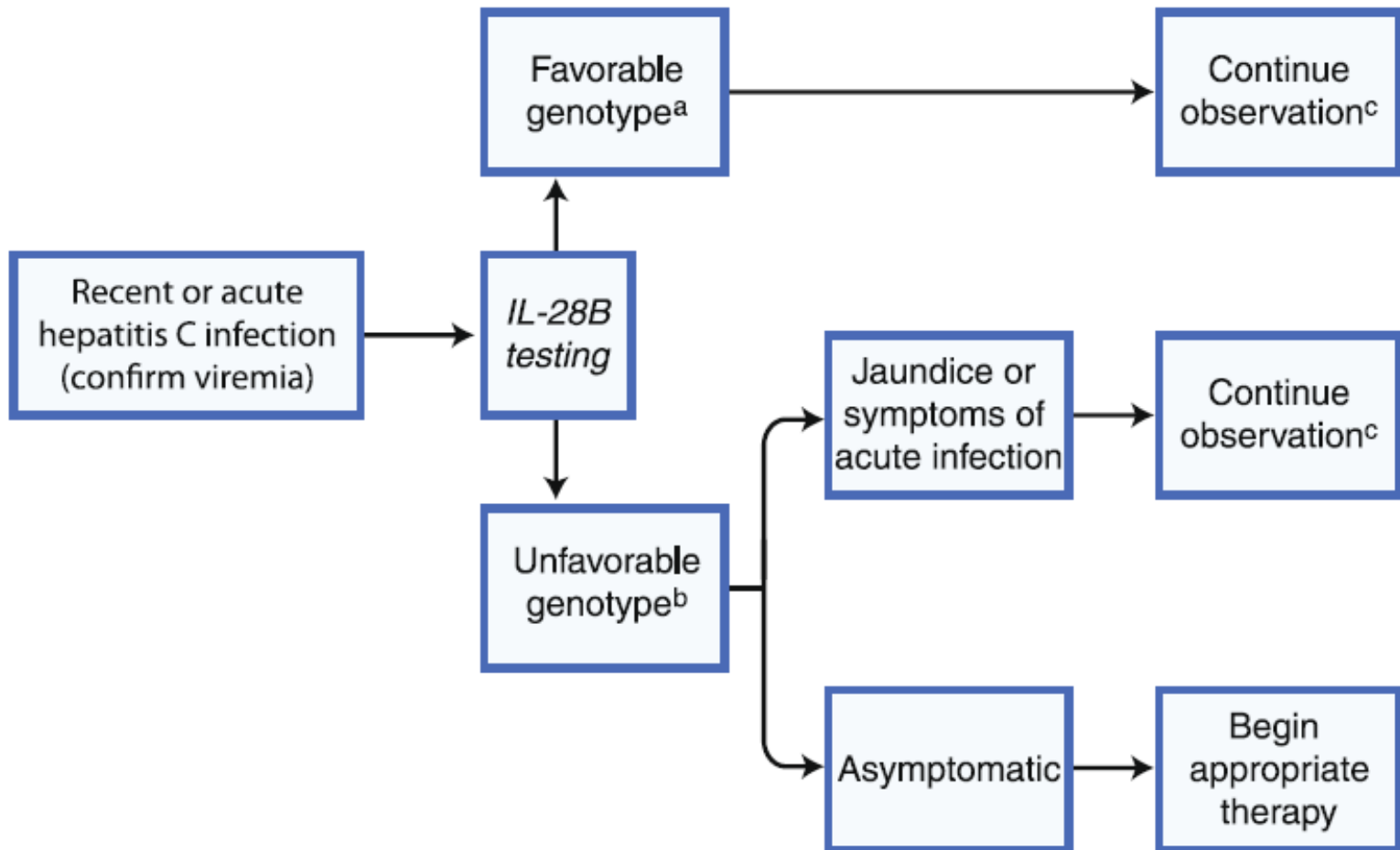
*Gerlach et al. Gastroenterology, 1999.*

# FACTORS THAT MAY AFFECT SVC

## IL-28B polymorphism:

It can be used as predictor of SVC as well as those who are more liable for SVR on treatment.

*Pearlman , Current Gastroenterology Reports, 2011.*



Pearlman BL, *Current Gastroenterology Reports*, 2011



# Predictors of SVC

- Despite all these factors, for a given person the outcome cannot be predicted by clinical features or single laboratory test.
- From the previously mentioned data, a predictive test or scoring system is needed to determine whether to treat early or to wait for a spontaneous clearance.



Thank you  
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