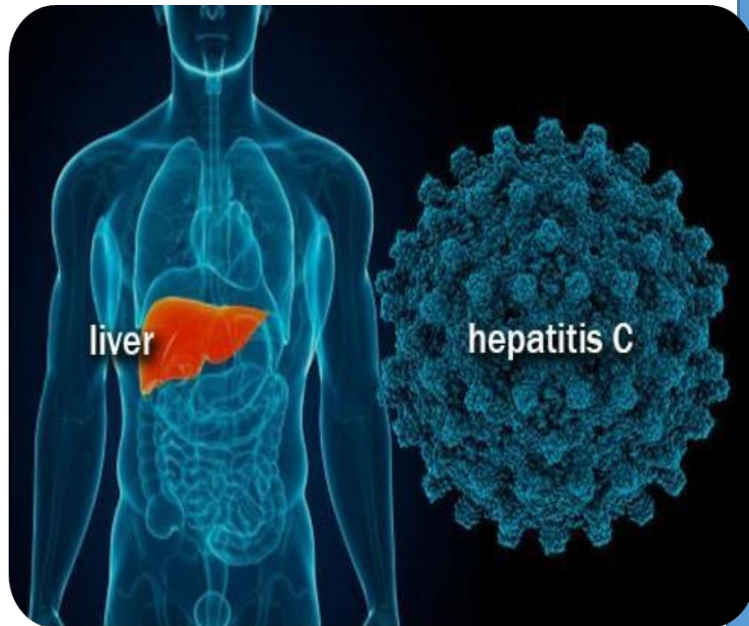


HCV

Dr.M.Jafarzadeh Infectious disease specialist



Definition of disease hepatitis C



Is an inflammation of the liver

The virus can cause both acute and chronic hepatitis

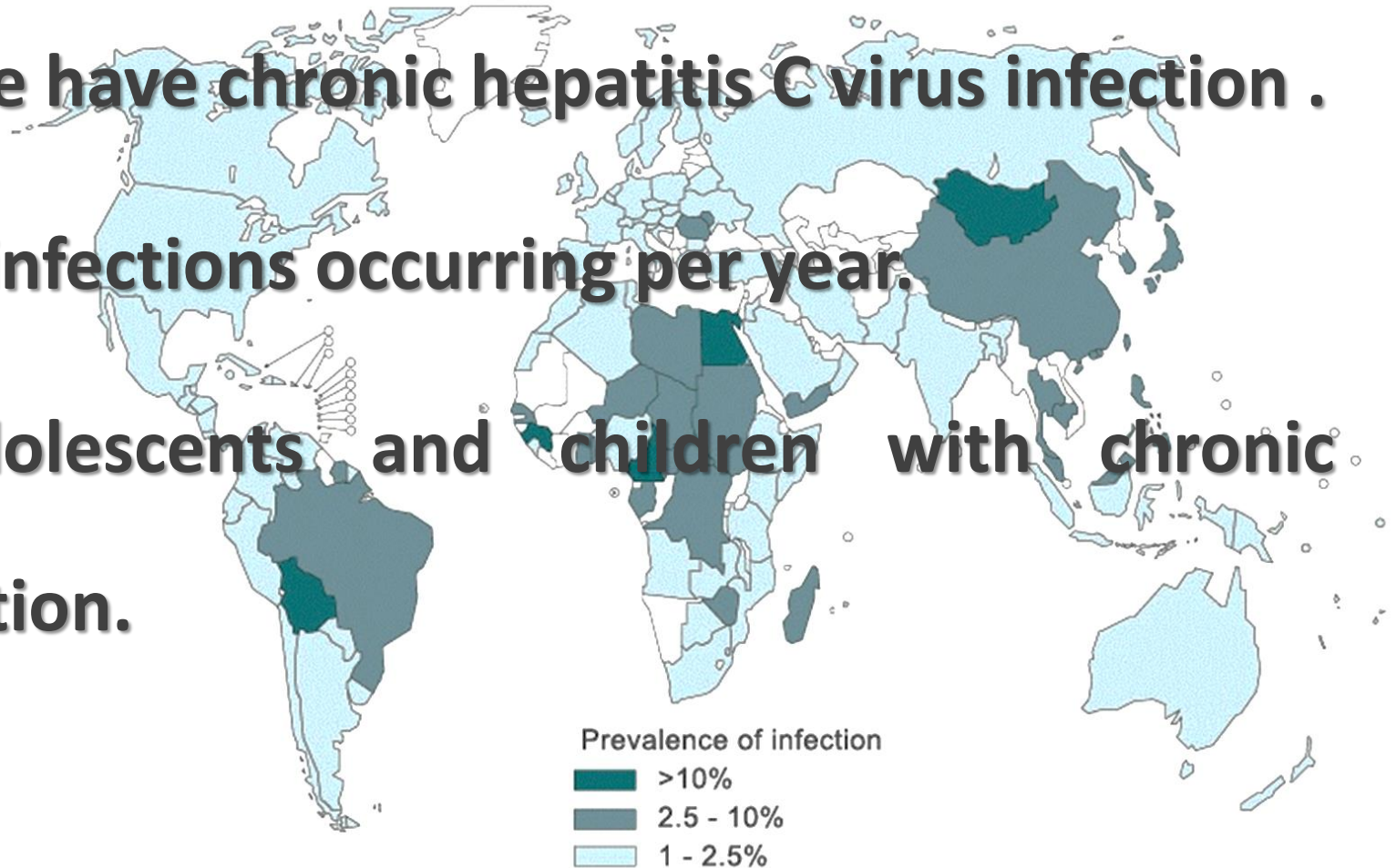
The HCV is a bloodborne virus



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Epidemiology of hepatitis C

- 58 million people have chronic hepatitis C virus infection .
- 1.5 million new infections occurring per year.
- 3.2 million adolescents and children with chronic hepatitis C infection.



HCV

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Hepatitis C virus transmission

Blood borne

1

Sexual

2

Mother to child

3



HCV

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Ways not to transmit the virus

- Shaking hands and kissing the affected person
- Using common eating utensils and utensils
- Normal socializing at work and home
- By air
- Sneezing and coughing
- Use of common toilet
- Swimming in a pool

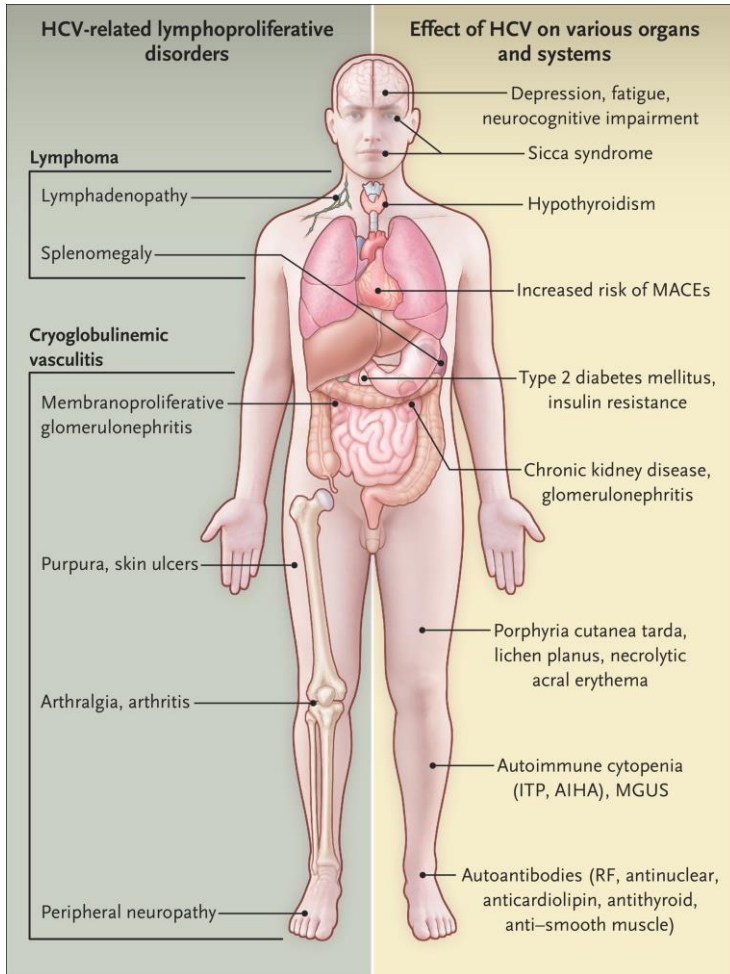


Hepatitis C screening

- History of blood transfusion
- Injecting illegal drugs
- Prison history
- Dialysis people
- Organ transplant history
- People living with HIV
- MSM
- Care centers

- Blood or organ donors
- People with a history of war injuries
- People with hemophilia and thalassemia
- People with risky sexual behavior
- People with a history of tattoos
- Children born to mothers with hepatitis C
- Employees working in health care centers

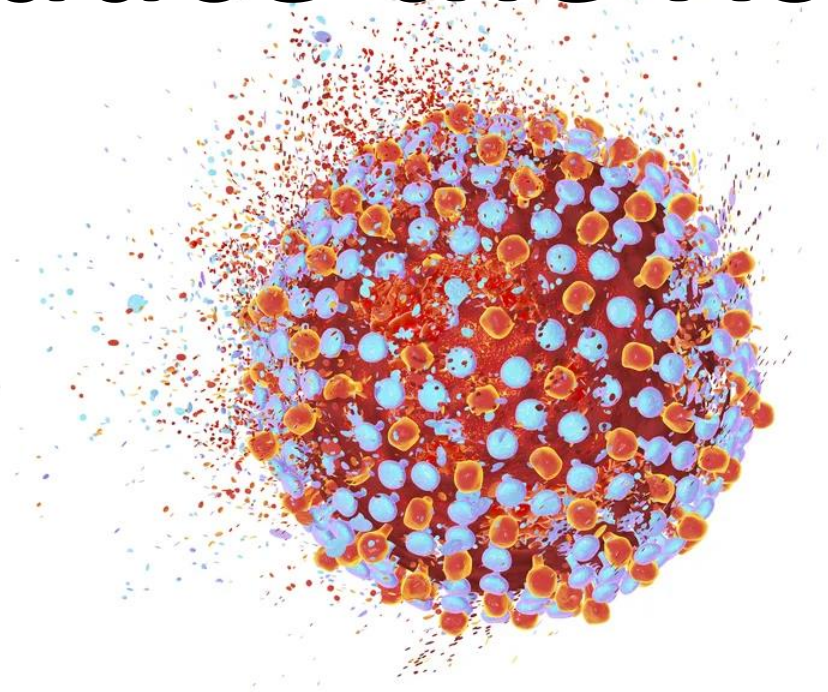
Incubation period and symptoms of the disease



- **Flu-like symptoms**
- **Feeling tired**
- **Anorexia**
- **Abdominal pain**
- **Feeling bored and unwell**
- **Nausea**
- **Yellowness in eyes and skin**

Prevention of hepatitis C

**Reduce the risk of exposure
to the virus**



vaccination

- There is currently no effective vaccine against hepatitis C.
- Prevention of contracting this disease is based solely on reducing the risk of exposure to this virus in healthcare service centers and reducing exposure in high-risk populations such as injecting drug users or during sexual contact.

Diagnosis

- **HCV Ab**
- **HCV RNA (PCR)**

Goal of HCV therapy

Prevention of HCV-related liver complications and extrahepatic complications

- **Prevent complications**
- **Improving the quality of life**
- **Prevention of HCV transmission**

Pre-therapeutic assessment

Liver disease severity must be assessed, and baseline virological parameters that will be useful for tailoring therapy should be determined.

Pre-therapeutic assessment

1. Determining whether the patient has cirrhosis or not
2. Examination of kidney function
3. Examining the medicines used by the patient
4. Viral count and genotype determination
5. Investigation of liver enzymes
6. Examining co-infection with hepatitis B virus
7. Examining the person for HIV infection

Treatment

Because of their virological efficacy, ease of use, safety and tolerability, interferon (IFN)-free, ribavirin-free, pangenotypic DAA-based regimens are the recommended options in HCV-infected patients without cirrhosis and in those with compensated cirrhosis, including “treatment-naïve” patients and “treatment-experienced” patients .

Treatment regimen for hepatitis C

- 1 Sofosbuvir (400mg) , Daclatasvir (60mg)
- 2 Sofosbuvir (400mg) , Velpatasvir (100 mg)
- 3 Sofosbuvir (400mg) , Ledipasvir (90 mg)

Follow up

- Patient follow-up in the 4th week of treatment
- Follow up every 4 weeks until the end of the treatment period

Determine response to treatment

12 weeks after the end of the treatment
(PCR (RNA-HCV) quality should be checked.

Follow up after treatment

In non-cirrhotic patients, there is no need to follow up after the end of treatment, but in cirrhotic patients, it is necessary :

- The patient should be reminded that the virus is gone, but the liver damage is still there and needs to be followed up.
- AFP and liver ultrasound should be done every 6 months
- 6 to 12 months after SVR, qualitative RNA-HCV should be checked again (PCR)
- There is a possibility of re-infection

Contraindications to the treatment of the patient by the G.P

- 1 If there is cirrhosis
- 2 If the serum creatinine is more than 3
- 3 If the patient is taking Amiodarone
- 4 pregnancy period
- 5 In case of co-infection of HCV with HIV
- 6 In case of co-infection of HCV with HBV

Indications for referral

1

A more than two-fold increase in AST and ALT

2

PCR positivity 12 weeks after completion of treatment

3

AFP and liver ultrasound

4

Co-infection of HCV with HIV

5

Co-infection of HCV with HBV

Immediate dispatch indications

1

Alertness Disorder

2

Behavior disorder

3

Acute bleeding

4

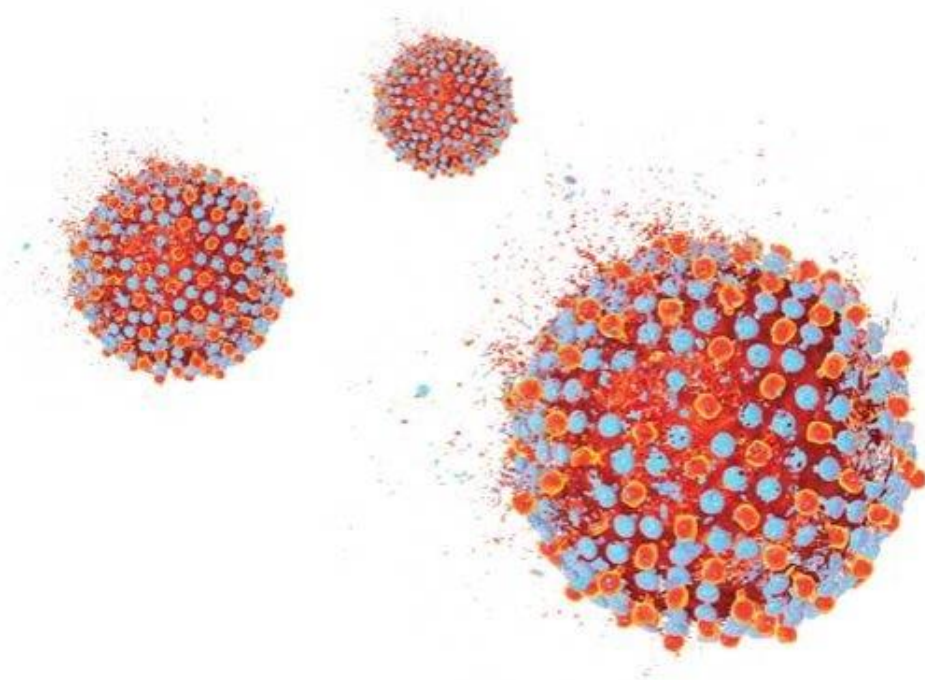
Severe vomiting

5

Pregnancy



These points should be considered



Amiodarone ■

Concomitant hepatitis B infection ■

In pregnancy ■

A lady suffering from hepatitis C ■

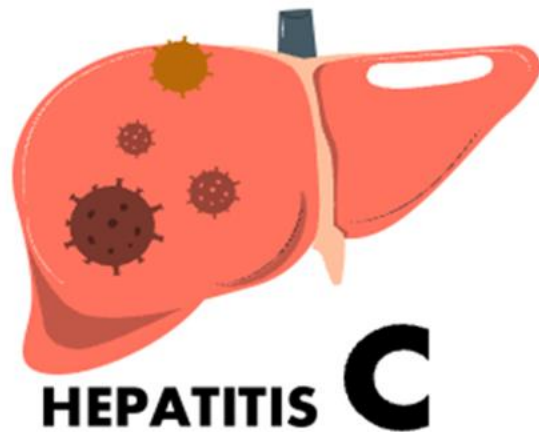
Interferon-based therapy ■

Taking immunosuppressants ■

and HBV Co-infection of HCV with HIV ■

Advanced cirrhosis ■

Statins ■



- 01 → ■ **Amiodarone**
- 02 → ■ **Concomitant hepatitis B infection**
- 03 → ■ **In pregnancy**
- 04 → ■ **A lady suffering from hepatitis C**
- 05 → ■ **Interferon-based therapy**
- 06 → ■ **Taking immunosuppressants**
- 07 → ■ **Co-infection of HCV with HIV and HBV**
- 08 → ■ **Advanced cirrhosis**
- 09 → ■ **Statins**

Drug interactions

Taking simultaneously with illegal drugs

Consuming simultaneously with drugs affecting the CNS

Simultaneous use with immunosuppressant drugs

Class	Drugs	SOF/LDV	SOF/VEL	SOF/DCV
ARV	TDF			
	Efavirens			
	Nevirapin			
	Etravirin			
Statin	Gemfibrozil			
	Fenofibrate			
	Atorvastatin			
	Fluvastatin			
	Lovaststin			
	Pitavastatin			
	Pravastatin			
	Rosovaststin			
	Simvastatin			

Class	Drugs	SOF/LDV	SOF/VEL	SOF/DCV
Anti-arrhythmics	Amiodarone			
	Digoxin			
Betablockers	Atenolol			
	Bisoprolol			
	Carvedilol			
	Propranolol			
CCB	Amlodipine			
	Diltiazem			
	Nifedipine			
	Losartan			
	Doxazosin			
	Enalapril			
	Enalapril			
Antiplatelets and Anticoagulants	Clopidogrel			
	Ticagrelor			
	Rivaroxaban			
	Warfarin			

