Hepatitis C: information for GPs
About Public Health England

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Hepatitis C:

Frequently Asked Questions for GPs

‘New oral treatments for Hepatitis C are now available for all and are highly effective and well tolerated’

Introduction

The Hepatitis C virus (HCV) is a blood-borne, highly infectious, single-stranded RNA virus which affects the liver. After an acute, usually asymptomatic, infection, approximately 20% of people clear the virus spontaneously and 80% progress to chronic HCV infection which can lead to cirrhosis and liver cancer, if untreated.

Epidemiology of Hepatitis C

An estimated 160,000 people in England (0.4% prevalence) are infected with HCV i.e. 1 in 200 so most general practitioners will have several infected people registered at their practice. Around 90% of infected people have contracted the disease through injecting drug use, with migrants from high prevalence countries also a significant risk group. Of those with chronic infection, 10-15% will develop cirrhosis over a 20 year period; and of those with cirrhosis around 2% will develop hepatocellular carcinoma (HCC) each year.

Progression of liver disease is faster in the presence of co-factors for liver damage including: excess alcohol consumption; age over 40 years; male gender; and co-infection with HIV or hepatitis B virus (HBV).

There are 6 genotypes: 1, 2 and 3 are more common in the northern hemisphere, 4 in the Middle East, 5 in Southern Africa and genotype 6 in South Asia. Patients can be co-infected by more than one genotype. The majority of infections in England are genotype 1 (50.1%) and genotype 3 (38.4 %) (PHE 2018).

What is the treatment?

Highly efficacious Direct Acting Antivirals (DAA) targeting different stages in the HCV lifecycle are successful for over 90% of patients. Therapy is most effective when given

1 Include Dasabuvir, Glecaprevir, Pibrentasvir, Grazoprevir, Elbasvir, Ledipasvir, Sofosbuvir, Ombitasvir, Paritaprevir, Ritonavir, Velpatasvir.
before the onset of cirrhosis. Treatment is usually a once daily, oral tablet regimen for either 8 or 12 weeks and should be initiated and monitored in secondary care. DAAs are well tolerated with minimal side effects and result in high rates of Sustained Virological Response (SVR) which equates to ‘cure’.

Successful treatment will prevent further liver damage caused by the virus, but patients with cirrhosis require surveillance for HCC.

**What is the treatment if first line DAAs are unsuccessful?**

From late May 2018 NICE approved the use of the DAAs sofosbuvir, velpatasvir, and voxilaprevir across all HCV genotypes for patients with and without cirrhosis and who have failed prior treatment. SVR with this regime is achieved in over 97% of patients.

**What are the routes of transmission?**

The primary transmission route in the UK is injecting drug use (including steroids and image enhancing drugs) where there is sharing of needles or other injecting equipment. For those injecting users attending drug services the prevalence of HCV infection is around 50%. Other transmission routes include:

- the use of unscreened or non-heat treated blood transfusion or blood products in the UK prior to 1991
- re-use of un-sterilised injecting equipment, surgical instruments, tattooing and body piercing equipment.
- needle stick or sharps injury
- using unsterilized or shared needles in other environments for example in acupuncture, tattooing or body piercing in unregulated settings
- sexual transmission risk is very low, but may be higher if there is exposure to blood; such as menstrual blood or from bleeding during anal sex
- vertical transmission from mother to baby at the time of birth is uncommon - the risk is estimated at 3-5% and 20% if the mother has both HIV and HCV
- direct contact with the blood of an infected person including sharing personal items that may have blood on them (razors, toothbrushes, etc.)

For some patients the source of infection may not be identified.
What is the clinical presentation?

While acute HCV infection is usually asymptomatic, some patients experience a short non-specific illness with fatigue, fever and right upper quadrant discomfort. Approximately 20% of those with acute infection clear the virus and up to 80% progress to chronic infection.

Chronic infection is identified by the persistence of HCV RNA in the blood for six months or longer, the rate of liver disease progression is variable and can take many decades, depending on the presence of co-factors. Patients co-infected with HIV-1 have a poorer prognosis than those with HCV infection alone.

The development of cirrhosis is associated with related complications including portal hypertension, oesophageal varices, ascites, hepatic encephalopathy and hepatocellular carcinoma.

Who should be screened?

NICE guidance (2012) recommends screening for HCV infection in the following situations:

- current and past injecting drug use
- blood transfusion pre-1991 and/or treatment with a blood product pre-1986
- born or raised in a high prevalence country (Africa, Asia, the Caribbean, Central and South America, Eastern and Southern Europe, the Middle East, the pacific islands)
- babies whose mothers have HCV infection
- prisoners and young offenders
- looked after children
- those living in hostels or who are homeless
- HIV positive men who have sex with men
- close contacts of someone with HCV infection

Whenever a liver function test is returned with unexplained raised transaminase levels, consider testing for HCV as part of further investigation, even when there are no overt risk factors.

What are the tests for diagnosing HCV infection?

Initial screening for HCV infection is with anti-HCV serology. The anti-HCV antibody can first be detected between 5 and 12 weeks after an acute infection, though for some patients it is longer, and typically is positive lifelong, including when the virus is cleared spontaneously or following anti-viral treatment. Where patients are found to be anti-HCV positive they should be tested for HCV RNA to demonstrate the presence of the virus, which indicates active infection.
Infection does not confer life-long immunity; i.e. even if the virus is cleared patients can be re-infected. Testing for re-infection therefore requires HCV RNA.

NICE recommends offering annual testing for HCV in drug services who have previously tested negative or have cleared virus spontaneously or through treatment but remain at risk of infection (NICE PH43 2012).

What about harm reduction?

HCV infected patients should avoid excess alcohol, obesity and co-infection with blood borne viruses. They should be offered Hepatitis A and Hepatitis B vaccinations and annual flu vaccination (see the PHE Green Book).

What can patients do to prevent spread of infection?

HCV infected patients can reduce the risk of transmission to others by not sharing any drug-injecting equipment (needles, syringes, spoons and filters, etc.) and not sharing razors or toothbrushes.

The risk of contracting hepatitis C through sex is very low, however, it may be higher if exposure to blood is more likely, such as menstrual blood or from bleeding during anal sex and in these cases condoms should be worn.

Patients should discuss their infection with their household and sexual contacts and anyone they share injecting drug equipment with and advise that they seek testing for hepatitis C.

Who can people contact for help and support?

The Hepatitis C Trust is staffed by people who have all had the disease and offers help and support free of charge. Their telephone number is: **020 7089 6221** and their web address is [hepctrust.org.uk](http://hepctrust.org.uk).

The British Liver Trust can also help – their telephone number is **0800 652 7330** and their web address is [britishlivertrust.org.uk](http://britishlivertrust.org.uk).

Resources

Royal College of General Practitioners Liver Disease Toolkit

PHE (for links to posters, social media banners, testing quiz, videos in different languages): [https://publichealthengland-immunisati.app.box.com/s/iptxtlziu57evyejw8zgvhimh0pjwa05](https://publichealthengland-immunisati.app.box.com/s/iptxtlziu57evyejw8zgvhimh0pjwa05)

These resources are free and there are also free posters available to order.

The Hepatitis C Trust: [www.hepctrust.org.uk](http://www.hepctrust.org.uk)
References

PHE Hepatitis C in England: 2018 report

NICE (2012) NICE PH 43 Hepatitis B and C testing: people at risk of infection. NICE 2012


WHO (2016) Action plan for the health sector response to viral hepatitis in the WHO European Region