Hepatitis C Virus Infection in Children

What is Hepatitis C?
Inflammation of the liver is known as “hepatitis”. There are many causes of hepatitis, and usually in children it is caused by a viral infection. Hepatitis C (HCV) is one of the viruses that can cause hepatitis.

Six strains (or types) of HCV have been identified. These are called “genotypes”. HCV genotypes 1 and 3 are the commonest types found in Australia.

If a person has the hepatitis C virus for more than six months this is called chronic hepatitis C infection. Some people, both children and adults, can clear the virus themselves after being exposed to the hepatitis C virus.

There is no immunisation currently available against hepatitis C.

Symptoms of hepatitis C
The hepatitis C virus infection may cause no obvious symptoms, even though liver damage may be occurring. For some people with chronic hepatitis C infection it can cause chronic liver disease with symptoms such as: jaundice (yellowing of the whites of the eyes and the skin), tiredness, nausea, fever and lack of appetite but this is rare in children.

Who gets hepatitis C virus?
The hepatitis C virus is spread by blood to blood contact and rarely via other body fluids. People at particular risk are intravenous drug users who share needles, and people who received blood transfusions before February 1990, when screening of blood for Hepatitis C began in Australia. Hepatitis C can be spread sexually although this is uncommon.

Can babies catch hepatitis C from their mothers?
Yes, transmission of the virus can occur from a mother to her baby.

This is known as vertical transmission. It is thought to occur whilst in-utero or during delivery. Of 100 babies born to mothers who have Hepatitis C, approximately 5-7% will acquire the virus.

Hepatitis C virus has not been shown to be transmitted through breast milk and breastfeeding is encouraged. If the mother has cracked and bleeding nipples the milk should be expressed and discarded until nipples have healed.

What are the long term effects?
Children with chronic hepatitis C virus infection usually feel perfectly well. After many years of infection they may develop cirrhosis of the liver (increasing and permanent scarring of the liver) or liver cancer, but this is unusual in childhood. Chronic hepatitis C infection with subsequent liver disease and/or liver cancer is one of the commonest indications for liver transplantation in adults; this is rarely required in children.

It is difficult to predict who will go on to develop serious liver problems and therefore it is important for all children infected with HCV to be monitored.
It is important to maintain a healthy liver by immunising against other hepatitis viruses like hepatitis B and hepatitis A. It is also recommended to; have a good diet, exercise regularly, maintain a healthy weight and avoid alcohol and drugs in adult life.

**Can hepatitis C be treated?**

Yes, many adults and some children are treated with Pegylated Interferon and Ribavirin. From March 2016 oral only treatment has been approved on the PBS for adults. There are current clinical trials of these oral medications with children, with the hope that it will also be available for treating children in the future.

The length of treatment depends on the strain (genotype) of HCV that you are infected with ranging between 3 and 12 months.

Children who are treated for HCV are monitored by a specialist and treatment depends on how your child’s liver is functioning, the impact of symptoms on their life, blood results, liver biopsy and ultrasound results.

**Can hepatitis C virus be caught?**

**Q** From other children playing together or in the classroom or from general contact like kissing and cuddling?

**A** No.

**Q** From a blood transfusion in hospitals today?

**A** There is a very low risk in Australia, but infection can occur if a recently infected blood donor’s hepatitis C test is not yet positive.

**Who should be tested for hepatitis C virus?**

- Children born to a mother with the hepatitis C virus
- Anyone who has symptoms of hepatitis or anyone with unexplained abnormal liver tests
- Anyone at risk of hepatitis C due to exposure to blood or blood products before February 1990
- People who inject drugs.

**Remember:**

- HCV is spread by contact with infected blood
- It is important to know your hepatitis C status if you are at risk of hepatitis C