

Women and hepatitis C

Hepatitis C can affect women differently from men - possibly due to the effects of hormones. Women with hepatitis C thinking about using hormone treatment or any related medications should discuss possible complications with their doctor. There is no evidence that hepatitis C adversely affects pregnant women, or her unborn child but there is a low risk of transmission from mother to baby during birth.

Hormonal effects

Hormones are chemicals that play a role in the menstrual cycle, reproduction, sexual desire, and in keeping the body healthy. Hepatitis C may cause menstrual irregularities, particularly if a woman has severe liver disease as the liver plays a role in regulating hormones.

Hormone Replacement Therapy

If women have severe liver disease they will need to discuss with their doctor or specialist whether hormones should be used for menopausal symptoms. In some cases, doctors may recommend external vaginal creams and skin patches rather than pills.

Birth control

Some women tolerate the oral contraceptive pill, while others don't. The same applies for women with hepatitis C. If women are experiencing severe liver disease, they may not be able to tolerate oestrogen hormones present in oestrogen-based contraceptive pills (the most common pill). In these cases, the progesterone-only pill ('mini pill') or Depo-Provera (3 monthly injection) may be preferable. In any case, women with hepatitis C should consult a gynaecologist or women's health specialist to see which birth control methods are most suitable for them.

Pregnancy and hepatitis C

Hepatitis C does not affect the ability of women to become pregnant. Women with advanced liver disease may want to consult a specialist for more information. The overall risk of transmitting hepatitis C to your baby while pregnant or during delivery is less than 5%.

Women with very low levels of the virus are thought to be less likely to transmit hepatitis C to their babies. For women infected with both HIV and hepatitis C, the risk of transmission is higher with transmission rates of 16% being found.

It's not clear when transmission from mother to baby happens. Most research indicates that transmission occurs during delivery, as hepatitis C cannot cross from the mother's bloodstream into the baby's bloodstream. However, some studies indicate that transmission can occur during pregnancy and is usually related to invasive procedures such as amniocentesis.

Hepatitis C transmission rates are similar for caesarean section and vaginal births. In the absence of conclusive research about the timing of transmission, it is important to note that caesarean section is not recommended as the preferred mode of delivery. The use of forceps and scalp electrodes should be avoided during delivery (if clinically appropriate) as they can break the baby's skin.

All babies born to women who have hepatitis C will test hepatitis C antibody positive at birth because they inherit their mother's antibodies. By 18 months, around 95% of babies will have cleared their mother's antibodies and test negative for hepatitis C.

Women and hepatitis C treatment

Current conventional treatment of hepatitis C consists of two drugs named 'pegylated interferon' and 'ribavirin', called combination therapy. You cannot begin combination therapy if you are pregnant, likely to become pregnant or breastfeeding, because ribavirin can cause severe birth defects. The effect of interferon on the foetus is unknown. If you are on pegylated interferon and ribavirin combination therapy, both partners are required to use effective contraception so that pregnancy does not occur during, or for six months after treatment has finished.

Side effects of interferon can include temporary hair loss and changes in weight – with weight loss being more common. Occasionally, auto-immune effects

occur and those involving thyroid abnormalities tend to be more common in women, probably because women more commonly experience thyroid disease. Recurrent yeast infections have also been reported and attention to diet can help in this regard.

Research has shown that people with high iron levels do not respond as favourably to interferon treatment. Some research has shown that women respond better to treatment than men, possibly because menstruation reduces iron levels. However, ribavirin has been associated with anaemia (low red blood cell count), which affects women more than men. During treatment your blood count will be monitored and the dosage of ribavirin adjusted if necessary.

If you have started combination therapy for hepatitis C and believe you may be pregnant, you need to see your doctor immediately and let them know. If pregnancy is confirmed, your doctor and/or specialist can discuss options with you about your pregnancy and treatment options.

Breastfeeding and hepatitis C

The choice to breastfeed is very personal and for most women, breastfeeding is an important and enjoyable part of being a mother. Hepatitis C has been found in breast milk – but not in sufficient quantities to transmit the virus. There is no medical reason for mothers with hepatitis C not to breastfeed their child.

If the mother has cracked or bleeding nipples, and if the infant has cuts or sores on, in or around the mouth, the risk of hepatitis C transmission increases. It is recommended that if you have cracked or bleeding nipples to discard the milk from that breast or avoid breastfeeding until the breast and nipples are healed.

To learn more about breastfeeding positions and techniques that may help to prevent cracked or bleeding nipples, consult a lactation consultant or midwife at a maternity hospital or women's health centre

How does hepatitis C affect children?

It is not believed that hepatitis C physically affects children any differently from adults or that the natural progression of the illness is significantly different. As with adults, children may not experience symptoms of hepatitis C for 10 – 15 years. It is, however, recommended that children with hepatitis C have their

liver monitored regularly as a precaution to check for the possibility of any signs of early liver disease.

Testing and treatment options for children

For those parents who want to know whether or not their baby has contracted hepatitis C, an antibody test can be carried out after 18 months of age. Alternatively, a PCR test could be done at 4-6 weeks with follow-up testing if necessary. Babies who contract hepatitis C at birth have a 25% chance of spontaneously clearing the virus (same as adults who contract hepatitis C) through their own immune response.

Treatment for hepatitis C is rarely needed or offered to children. Presently, there is limited research into treatment for children and inadequate evidence to provide general guidelines for their treatment. However, where there is evidence of progressive liver disease or fibrosis in children then treatment may be considered an option.

The Royal Children Hospital has a specialised unit for children with liver issues.

Useful contacts

Hepatitis C Victoria

Hep C Infoline 1800 703 003

Email: info@hepcvic.org.au

Web: www.hepcvic.org.au

Hepatitis Australia

Telephone: 02 6232 4257

Email: admin@hepatitisaustralia.com

Web: www.hepatitisaustralia.com

Maternal and Child Health Line

13 22 29 (24 hours)

Royal Children's Hospital

50 Flemington Road

Parkville VIC 3052

Telephone: 03 9345 5522

Useful publications

Women and hepatitis C

Available from Hepatitis C Victoria

Useful websites

Maternal and Child Health Line

www.office-for-children.vic.gov.au/childrens-services

This infosheet is intended as a general guide only. It is not intended to replace expert or medical advice.

Produced by Hepatitis C Victoria. Revised June 2009