

Obstetric cholestasis (itching liver disorder): information for you



Royal College of
Obstetricians and
Gynaecologists

Setting standards to improve women's health

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Key points

- Obstetric cholestasis is a liver disorder which occurs during pregnancy.
- The main symptom is itching (pruritus) without a skin rash.
- In England about one in 160 women (or less than 1%) are affected with obstetric cholestasis.
- The causes of obstetric cholestasis are not yet fully understood.
- Treatment can relieve the itching.
- There is uncertainty about how this disorder may affect your baby. There may be an increased risk of stillbirth.
- If you have obstetric cholestasis, you are more likely to have a premature birth, either because you are induced, or because labour starts prematurely.

- Other liver problems need to be ruled out to make a diagnosis of obstetric cholestasis.
- Obstetric cholestasis gets better after your baby is born.
- Your healthcare professionals should help you in making decisions.

About this information

This information is intended for you if you have been diagnosed with obstetric cholestasis. It is also intended for you if you are pregnant and have persistent itching. It aims to help you and your healthcare team make the best decisions about your care. It is not meant to replace discussions with a healthcare professional about your situation.

Some of the recommendations here may not apply to you. This could be because of some other illness you have, your general health, or some or all of these things. If you think the treatment or care you get does not match what we describe here, talk about this with your obstetrician or midwife.

What is obstetric cholestasis?

(also known as 'intrahepatic cholestasis of pregnancy')

Obstetric cholestasis is a disorder that affects your liver during pregnancy. The main symptom is itching of the skin (pruritus). There is no skin rash. The itching gets better when your baby has been born.

Obstetric cholestasis is uncommon. In England, this disorder affects about one in 160 women (or less than 1%). Obstetric cholestasis is slightly more common among women of Indian-Asian or Pakistani origin with three in 200 (1.5%) of women affected. In Chile and Scandinavia, obstetric cholestasis is more common, with five in 200 pregnancies affected (2.5%).

What causes obstetric cholestasis?

The causes of obstetric cholestasis are not yet understood. It is thought that genetic and environmental factors (for example, diet, seasonal variations) may be involved.

- **Hormones**

Some doctors believe that pregnancy-related hormones affect the way your liver works and cause obstetric cholestasis. Estrogen may influence the way the liver deals with a number of substances, including bile salts.

Bile is a yellowish fluid that contains waste products and chemicals (known as bile salts). Bile salts usually flow from the liver to your gut to help the digestion of food. In obstetric cholestasis, the flow of bile is reduced. This causes a build-up of bile salts in your body. Some doctors think that it is the effect of this build-up that causes the itching during pregnancy.

One study has suggested that one in five women with obstetric cholestasis have very high levels of bile salts (more than four times higher than normal) and that these women may be more likely to have a premature birth.

- **Genetic and environmental factors**

Obstetric cholestasis is more common in women from certain ethnic groups, particularly those from South American and Scandinavian regions.

Further evidence for a genetic component is that obstetric cholestasis runs in some families. If you have obstetric cholestasis, there is also a risk of recurrence in a future pregnancy. Your healthcare professional will give you full information (see section **Why do I need to attend my follow-up appointment(s)?**).

How is obstetric cholestasis diagnosed?

It is important to check for other causes of abnormal liver function before making the diagnosis of obstetric cholestasis. You may be offered other tests. What the tests are for should be explained to you.

Consultation

Tests do not always involve getting results from a laboratory. Valuable information can be obtained from your family and medical history.

Inspection of the skin

Your skin will be carefully examined to check that your itching is not related to other skin conditions, such as eczema. It is possible that you may have more than one condition.

Blood tests

You may be offered one or more blood tests for obstetric cholestasis. These include:

- **Liver function test (LFT)**

A liver function test involves a number of laboratory tests that look at how the liver is working. This test is performed on a sample of your blood. Specific liver enzymes (proteins that bring about chemical reactions in the body) are checked.

- Bile salt test

This measures the level of bile salts in your blood. The bile salt level can be abnormal even if your liver function test is normal.

- Other blood tests

Other tests on your blood will rule out other causes of liver problems including viral hepatitis, Epstein Barr virus, cytomegalovirus, as well as a liver autoimmune screen for hepatitis and cirrhosis.

Ultrasound scan

An ultrasound scan can check for liver abnormalities and gallstones.

Follow-up tests after birth

Obstetric cholestasis gets better after your baby is born. If you continue to have abnormal liver function tests, this may indicate a different problem and you should be referred to a specialist.

It is important that you attend your follow up appointment(s). See [Why do I need to attend my follow-up appointment\(s\)?](#).

How soon can I expect to be given a diagnosis?

For some women with obstetric cholestasis, it can take several weeks after the itching begins before a blood test can detect any problem.

If you have a normal blood test result (LFT) and you are still itching, then you should be offered a repeat blood test every other week.

What does obstetric cholestasis mean for me and my baby?

Obstetric cholestasis can be a very uncomfortable condition but it does not have any serious consequences for your health. The main symptoms are:

- Itching

Itching can vary from mild to intense and persistent. The itching can start any time during pregnancy, but it usually starts after 28 weeks.

The itching may occur on the palms of your hands and the soles of your feet. It may spread over your arms and legs and, less commonly, may occur on your face, back and breasts. There is no rash.

Many women have described the itching as constant and, at times, intolerable. Some women scratch so intensely that their skin breaks and bleeds.

The itching tends to be worse at night and can disturb sleep, often making you feel tired and exhausted during the day.

Obstetric cholestasis and the itching get better after birth and cause no long-term health problems.

- **Other effects**

A few women with obstetric cholestasis develop jaundice (yellowing of the skin due to liver changes). Some women feel unwell and lose their appetite. Other signs of obstetric cholestasis are dark urine and pale stools.

Further research is needed before we can be clear about the effects of obstetric cholestasis on the health of your baby.

- Thirty years ago, a study from an Australian hospital reported that women with obstetric cholestasis had a higher risk of stillbirth than women without this condition. As a result of this study, many women with obstetric cholestasis had actively managed pregnancies, which means that they had additional monitoring and were induced early (usually after 37 weeks).
- With active management (that is, monitoring and induction of labour at 37 or 38 weeks of pregnancy) women with obstetric cholestasis have no greater risk of stillbirth when compared with women without this condition.
- What we do not know is whether the reduction in stillbirth rate over the past 20 years is due to general improvement in obstetric and neonatal care, general improvement in women's overall health, or the active management of monitoring and induction at 37 or 38 weeks of pregnancy.
- Women with obstetric cholestasis are more likely to have a preterm birth. This is due partly to induction of labour (one in four women with obstetric cholestasis are induced). There is also an increased risk of going into labour prematurely (one in ten women labour prematurely).
- We do not know if it is safe to continue monitoring a woman's pregnancy and wait for natural labour.

Will I need extra antenatal care?

Depending upon your circumstances, you may be advised to have additional antenatal checks to monitor your baby.

- Additional monitoring of the baby may include keeping a kick chart, monitoring your baby's heart rate (cardiotocography) and ultrasounds for growth and liquor (fluid) volume. None of these monitoring tests can predict whether a particular baby is at risk of stillbirth.

Your healthcare professional will have a full discussion with you so that together you can decide what is best for you and your baby.

What treatment can I get?

Unfortunately, there is no cure for obstetric cholestasis except the birth of your baby.

For most women, treatment can only ease symptoms. A choice of treatments is available for you. These might include:

- skin creams and ointments to relieve the itching
- drugs to reduce the build up of bile salts in the liver - ursodeoxycholic acid helps itching and reduces the level of bile salts. There have only been a few trials and it is not licensed for treatment in pregnancy
- a daily supplement of vitamin K (water-soluble preparation) - obstetric cholestasis can reduce the absorption of vitamin K from the diet. Vitamin K is needed to help blood clotting so women with obstetric cholestasis may have an increased chance of bleeding after birth.

Shortly after birth, your baby should be offered vitamin K, as are all babies.

When is the best time for my baby to be born?

There is considerable debate about the best time for the baby to be delivered. None of the blood tests is helpful in deciding. If you are itching and feeling uncomfortable, you may choose to be induced early. Induction of labour may be offered from 37 weeks onwards. Early induction carries an increased chance of caesarean section and an increased chance of your baby being admitted to the special care baby unit because they are a few weeks early.

Each pregnancy is unique. Your options will be explained so that you can make an informed choice.

Why do I need to attend my follow-up appointment(s)?

Obstetric cholestasis gets better after birth. The purpose of your follow-up appointment(s) is to ensure that your itching has gone away and your liver is working normally. The appointment should be at least three weeks after your baby's birth, because it may take this amount of time to get better. Continuing symptoms and abnormal liver function tests suggest a different problem and you should be referred to a specialist.

At your follow-up appointment(s) your health care professional should:

- check that the itching has resolved
- take a blood test to check liver function to confirm that your liver is working normally
- discuss the high chance that obstetric cholestasis may happen again in a future pregnancy

If you have had obstetric cholestasis in your pregnancy, it is safe to take the estrogen-containing contraceptive pill if your liver function test is normal. If you start itching, you should speak to your GP or healthcare professional.

Is there anything else I should know?

- Little is known about how obstetric cholestasis affects a baby's development in the womb. There is no scientific evidence that obstetric cholestasis affects your baby's growth or causes disability.
- Some women have found that having cool baths and wearing loose-fitting cotton clothing helps to reduce the itching.
- Drinking alcohol does not cause obstetric cholestasis. However, it is sensible, to avoid alcohol intake when pregnant, especially when there is evidence of any liver disease (further information can be found on the RCOG website (www.rcog.org.uk) under 'Alcohol in pregnancy - information for you and for your baby').
- Some women have found that high stress situations increase itching. There are a number of ways you can alleviate stress, including relaxation classes, counselling, support groups and complementary medicine. You should discuss your choice with your healthcare professional.

Sources and acknowledgements

This information is based on the Royal College of Obstetricians and Gynaecologists' (RCOG) guideline on obstetric cholestasis (which was published in January 2006 and is due to be reviewed in January 2009). This information will also be reviewed, and updated if necessary, once the guideline has been reviewed. The guideline contains a full list of the sources of evidence we have used. You can find it online at: http://www.rcog.org.uk/resources/Public/pdf/obstetric_cholestasis43.pdf.

Clinical guidelines are intended to improve care for patients. They are drawn up by teams of medical professionals and consumer representatives who look at the best research evidence available and make recommendations based on this evidence.

This information has been developed by the Patient Information Subgroup of the RCOG Guidelines and Audit Committee, with input from the Consumers' Forum and the developers of the clinical guideline. It was reviewed before publication by women attending clinics in London and Essex. The final version is the responsibility of the RCOG Guidelines and Audit Committee.

Other organisations

Obstetric Cholestasis Support and Information Line

Website: www.ocsupport.org.uk

Email: JennyChambersOC@aol.com

The British Liver Trust

2 Southampton Road

Ringwood BH24 1HY

Tel: 0870 770 8028

Website: www.britishlivertrust.org.uk

Email: info@britishlivertrust.org.uk

A FINAL NOTE

The Royal College of Obstetricians and Gynaecologists produces patient information for the public. This is based on guidelines which present recognised methods and techniques of clinical practice, based on published evidence. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor or other attendant in the light of the clinical data presented and the diagnostic and treatment options available.

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