Obstetric Cholestasis
(itching liver disorder)
Information for parents-to-be
You have been given this leaflet because you have been diagnosed with (or are suspected of having) a condition called obstetric cholestasis (OC). In this leaflet we will give you information about this condition. If you still have any questions after reading this leaflet, please speak to your midwife, general practitioner or obstetrician.

What is obstetric cholestasis or ‘itching liver disorder’?

(also known as ‘intrahepatic cholestasis of pregnancy’)

Obstetric cholestasis is a condition that affects your liver during pregnancy. The main symptom is itching of the skin but it doesn’t cause a skin rash or spots. It most often affects the palms of the hands and soles of the feet. In England, around 1 in every 160 women (less than 1% of all pregnant women) will develop OC.

During your pregnancy we can give you treatment to help relieve the itching. The itching will then get better by itself after your baby has been born.
What causes obstetric cholestasis?

The causes of obstetric cholestasis are not yet fully understood. It is thought that it could be caused by the different hormones that you produce during pregnancy, or that genetic (inherited) factors may be involved.

**Hormones**

Pregnancy-related hormones may affect the way your liver works and cause obstetric cholestasis. A hormone called oestrogen may have an effect on the way your 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 into 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. It is thought that it is the effect of this build-up that causes the itching during pregnancy.

One research 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. Because of this, we will have checked the level of bile salts in your blood.

**Genetic factors**

Obstetric cholestasis is more common in women from certain ethnic groups, particularly those from South American and Scandinavian regions. Obstetric cholestasis has also been found to run in some families. If you have obstetric cholestasis during one pregnancy, there is a high risk that it may happen again in a future pregnancy.
How is obstetric cholestasis diagnosed?

If you have symptoms that suggest a diagnosis of obstetric cholestasis, you will have tests to check the function of your liver. You may also be offered tests to check for other causes of abnormal liver function.

**Consultation**
Tests do not always involve getting results from a laboratory. Valuable information can be obtained from talking to you about your family and medical history.

**Inspection of your skin**
Your skin will have been carefully examined to check that your itching is not related to other skin conditions, such as eczema. However, it is always possible that you may have more than one condition.

**Blood tests**
You may have been offered one or more blood tests for obstetric cholestasis. These include:

*Liver function test* (LFT)
The liver function test involves a number of laboratory tests which look at how your 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 acid (or bile salt) test*
This test measures the level of bile acids in your blood. The bile acid level can be abnormal even if your liver function test is normal.

**Further blood tests**
Further 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.

**Ultrasound scan**
An ultrasound scan can check for liver abnormalities and gallstones.
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. In the meantime you can use creams (e.g. aqueous cream with menthol or calamine lotion) to help with the itching.

If you have a normal liver function test (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 is usually persistent. The itching may 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 also spread over your arms and legs and, less commonly, on your face, back and breasts. There is no rash or spots with the itching. Many women have described the itching as constant and, at times, unbearable. You may need to be careful about scratching too hard as you may damage your skin.

The itching may be worse at night and might disturb your sleep. This can make you feel tired and exhausted during the day.

Obstetric cholestasis and the itching will get completely better after the birth of your baby 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 bowel movements.

Your baby
There is uncertainty about how this disorder may affect your baby. There may be an increased risk of stillbirth, though this risk is likely to be very low.

A recent study looked at all women in the UK diagnosed with severe obstetric cholestasis (women who had very high bile acid levels of more than 40 micromol/L). Such high bile acid levels are seen in only 1 in 7 cases of women diagnosed with obstetric cholestasis. This study showed a slightly increased risk of stillbirth in severe obstetric cholestasis when compared with women without this condition. However, the majority of the women in the study who suffered a stillbirth also had other medical complications. Further research is needed before we can be clear about the effects of obstetric cholestasis on the health of your baby.

A Swedish study has shown that with active management (that is, monitoring and induction of labour at the appropriate time), women with obstetric cholestasis have no greater risk of stillbirth when compared with women without this condition.

Women with obstetric cholestasis are more likely to have a preterm birth (have their baby early). This is due partly to the decision to induce labour early and also due to an increased risk of going into labour prematurely (this happens to 1 in 10 women).

Depending on the level of bile acids in your blood and your response to treatment you may be offered an induction of labour at around 38-40 weeks (occasionally earlier in very severe cases). There are risks when inducing labour and the advantages and disadvantages of early delivery will be discussed with you.
Will I need extra antenatal care?

Depending upon your circumstances, you may be advised to have additional antenatal checks to monitor your baby. Additional checks may include monitoring your baby’s heart rate and an ultrasound scan to check for growth and fluid volume around your baby. None of these monitoring tests can predict whether your baby is at risk of stillbirth.

Your healthcare professional will have a full discussion with you so that you can decide together 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. However, we can offer you a choice of treatments to help ease the symptoms. These might include:

• skin creams, ointments and drugs to relieve the itching

• a drug to reduce the build-up of bile salts in your liver – ursodeoxycholic acid helps to reduce itching and reduces the level of bile salts. There have only been a few large trials and it is not licensed for treatment in pregnancy, however, it has been used for a number of years and there is little evidence of any harmful effects.

• a daily supplement of vitamin K – obstetric cholestasis can reduce how well you absorb vitamin K from your diet. Vitamin K is needed to help your blood to clot. This means you may have an increased chance of bleeding after birth. Vitamin K is also offered to all babies shortly after birth – this is especially important if they are born prematurely or their mothers have obstetric cholestasis.
When is the best time for my baby to be born?

There is considerable debate about the best time for a baby to be delivered if you have obstetric cholestasis. Being induced early means that you have an increased chance of needing a forceps delivery or a caesarean section. There is also an increased chance of your baby being admitted to the special care baby unit because they are a few weeks early. However, each pregnancy is unique. Your options will be explained and discussed with you so that you can make an informed choice about what to do.

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

After the birth of your baby it is important to have a follow-up visit with your GP. This is to make sure your itching has gone away and your liver is working normally. The follow-up appointment should be at about six weeks after your baby is born. If you have continuing symptoms and abnormal liver function tests this might suggest a different problem and you should be referred to a specialist.

At your follow-up appointment your GP should:

• check that the itching has stopped

• take a blood test to check your liver function to confirm that your liver is working normally

• discuss the high chance that obstetric cholestasis may happen again in a future pregnancy

• discuss contraceptive options with you. As you have had obstetric cholestasis in your pregnancy, the oestrogen-containing contraceptive pill may affect your liver function test.
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.

- Some women have found that high stress situations increase the itching. There are a number of ways you can help avoid stress, including relaxation classes, counselling, support groups and complementary medicine. You can discuss these options with your healthcare professional, who should be able to help.

Sources and acknowledgements

This information is based on the Royal College of Obstetricians and Gynaecologists’ (RCOG) guideline on obstetric cholestasis and their patient information leaflet. Both of these documents are available at www.rcog.org.

Wikstrom Shemer et al. (2013) Intrahepatic cholestasis of pregnancy and associated adverse pregnancy and fetal outcomes: a 12 year population based study. BJOG 120 (6) p717-723
Other organisations

**Obstetric Cholestasis Support and information**
Website: www.ocsupport.org.uk

Tel:  07549 667 011 (9am - 9pm, Monday, Thursday, Friday)
     07843 660 349 (10am - 8pm, Monday to Friday)

Email: supportline@icpsupport.org

**The British Liver Trust**
Website: www.britishlivertrust.org.uk/liver-information/liver-conditions/obstetric-cholestasis/
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**