

Monochorionic Twins Complications of Shared Placenta

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Important information for parents



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Monochorionic Twins

Complications of Shared Placenta

70% of identical twins are monochorionic. This means they share an outer sac and placenta. Two complications can occur as a result of the shared placenta – Feto-Fetal Transfusion Syndrome (FFTS) (otherwise known as Twin to Twin Transfusion Syndrome (TTTS)) and Selective Growth Restriction (sGR).

FFTS Transfusion Syndrome

What is FFTS?

In the shared placenta there are interconnecting blood vessels. In some cases blood flows more towards one twin than the other, there is an imbalance of blood flow from one twin to the other. Unfortunately it can be a serious condition.

FFTS affects approximately 15% of identical twins who share the same placenta.

In FFTS pregnancies, blood from one twin (donor) is transfused through the placenta to the other twin (recipient). The recipient twin (often larger than the other twin) receives more blood than usual from the placenta, which can put a strain on this baby's heart and makes the baby produce more urine than normal. This often results in extra fluid around the baby, within the amniotic sac which is called polyhydramnios. This can be uncomfortable for the mother and also increases the risk to the pregnancy by causing premature labour due to the extra pressure on the neck of the womb (cervix).

The “**donor**” twin (often smaller than the other twin) may become anaemic and dehydrated due to receiving less blood from the placenta. This in turn may result in less fluid around the baby (this twin produces less urine) within the amniotic sac and is called oligohydramnios.

If you would like more information regarding these conditions discuss them with your Obstetrician or the support groups listed below:

twin2twin South

42 Wentworth Crescent
Harlington
Hayes
Middlesex
UB3 1NN
Tel: 0208 581 7359
CorreenUKT2T@blueyonder.co.uk

Twin Trust

The Manor House
Manor Park
Aldershot
GU12 4JU
Tel: 0800 138 0509
www.twintrust.org

Twin2twin

www.twin2twin.org/

More information about laser treatment for TTTS can be found on the National Institute of Clinical Excellence website
<http://www.nice.org.uk/nicemedia/live/11270/31613/31613.pdf>

NHS Choices

www.nhs.uk

What treatments are available?

There is no treatment to cure the problem or share the placenta more evenly. However, if sGR is diagnosed there are ways to monitor the pregnancy very closely with ultrasound scans (often weekly scans) to determine the best time to deliver the babies. Often as the pregnancy progresses it becomes necessary to arrange closer monitoring and this may mean admission to hospital.

What does it mean for my pregnancy?

Every case of sGR can be very different and can vary from the very mild to the very severe. The monitoring of the pregnancy will depend on the severity and the progression. Often babies need to be delivered earlier when there is sGR but the doctors aim to get the pregnancy beyond 32 weeks if at all possible and sometimes even up to 34 weeks to have the best chance of a good outcome.

Some cases of sGR become further complicated by FFTS developing.

General Information

Sometimes, in the early stages of the conditions, it can be difficult to make a definite diagnosis at one scan, as the problem may be sGR or may be FFTS. In these circumstances the doctor would arrange to review the situation in a week's time until it is clear what the diagnosis is.

You may need to be referred to a tertiary Fetal Medicine Unit for a specialist opinion or in the case of FFTS if laser is considered

Many parents go through the diagnosis and treatment of FFTS and sGR and end up with healthy twins.

The babies are normal; it is the network of blood vessels in the placenta which are abnormal. This can happen in early pregnancy without warning and can only be diagnosed by the use of ultrasound scanning.

How is FFTS diagnosed?

Sometimes the mother will get symptoms related to this condition such as: premature contractions, rapidly expanding abdomen, the feeling of increased pressure, breathlessness and palpitations. However, there are often no signs of physical symptoms at all and diagnosis is made using **regular** ultrasound scanning.

Most cases occur before 24 weeks gestation. Occasionally FFTS can develop later but this is uncommon.

Ultrasound Scan

Early ultrasound scanning is necessary to determine the type of twins (chorionicity) in each multiple pregnancy. Early recognition of FFTS is desirable and therefore extra ultrasound scans are performed in early pregnancy if the placenta is found to be shared (a monochorionic pregnancy). These scans are usually done every 2 weeks from 16 weeks until 24 weeks. FFTS is detected by scanning and assessing differences in the fluid around each baby, differences in their sizes, differences in the bladder sizes, and looking for signs of heart failure in the recipient twin. Part of the ultrasound scan is called a Doppler scan which is performed to track the blood flow through the cords and see if it is normal. The condition can have different levels of severity depending on the scan findings.

What treatments are available?

Each diagnosis of FFTS is treated individually and intervention is not always necessary. If the condition is mild your pregnancy would be monitored by ultrasound scan and may even resolve on its own. If treatment is needed then the possible procedures are:

Laser Therapy:

If treatment is needed for FFTS, laser ablation therapy is best. It is a specialised treatment and only carried out in a few centres in the UK. This treatment attempts to rectify the problem by separating the blood vessels in the placenta. A thin hollow tube called an endoscope is inserted into the womb and a camera with a laser tip is passed down it. The laser is then used to cut the joining vessels apart. There are pros and cons to laser treatment and the doctor will discuss these with you, if necessary. If you need to consider this treatment you will be referred to one of the specialist centres.

Amnioreduction:

Amnioreduction is a procedure whereby fluid is taken from around the twin with polyhydramnios to try and prevent premature delivery because of overdistension of the uterus (womb). A needle is passed through the abdomen into the sac of the recipient twin and fluid removed. This procedure is always performed under direct vision with the ultrasound scan and usually takes about 30 minutes depending on how much fluid is removed. This may occasionally still be advised for later onset FFTS (after 26 weeks) – which is rare. Sometimes the procedure needs repeating a week or so later.

What does it mean for my pregnancy?

Each placenta can vary differently in each pregnancy, from the size, appearance and location in the uterus. Therefore, the treatment of choice can depend on these and other factors. Every case of FFTS can be very different and can vary from the very mild to the very severe. If mild, no treatment will be necessary. If more severe your consultant Obstetrician will answer any queries you may have during your treatment. The outcome for each pregnancy will depend on the severity and gestation at diagnosis. The earlier the diagnosis is made the more severe the condition may be and if this is the case, termination of pregnancy may be an option which can be discussed with your consultant Obstetrician.

Selective Growth Restriction (sGR)

What is sGR?

Selective growth restriction happens when one baby gets a bigger share of the placenta than the other baby. Therefore one baby grows normally but the other baby does not and become unwell because it is not getting enough nutrition. It occurs in about 10-15% of monochorionic twin pregnancies and can be mild or more severe.

How is sGR diagnosed?

Every time you have a scan the babies are measured and their weights estimated. Selective growth restriction is diagnosed when their weight difference is more 25%. The smaller baby often has less fluid around it and the normally grown baby has normal fluid around it. The smaller baby may have abnormal blood flow in the umbilical cord (measured using a Doppler scan).