Monochorionic Pregnancy

Congratulations!

You are expecting twins. About 1 in 8 pregnancies conceived are twin. Your twins appear to be monochorionic.

What are monochorionic twins?

About one third of twin pregnancies are monochorionic. These twins occur when one sperm fertilizes one egg which then splits into two babies (embryos).

Monochorionic twins are always identical.

The babies share the same afterbirth (placenta) and outer sac (chorionic membrane) but usually have their own inner sac (amniotic membrane). These twins are termed MCDA (monochorionic diamniotic). You have this type of twin pregnancy.

Rarely there is no membrane between the twins who share a single sac. These twins are termed MCMA (monochorionic monoamniotic).

Occasionally it may not be possible to be sure whether your pregnancy is monochorionic or dichorionic. These pregnancies would be managed as a monochorionic pregnancy.

What does this mean to me?

Most women with twin pregnancies progress normally. But there is an increased risk of having problems than if this was a single pregnancy.

You might experience an increased risk of:

- Symptoms of pregnancy
- Developing pre-eclampsia or blood pressure problems
- Anaemia
- Smaller babies and/or excessive fluid around the babies (polyhydramnios)
- Premature labour
- Your baby being admitted to our neonatal unit

An additional complication that can arise with monochorionic twin pregnancies is:

- A condition called twin to twin transfusion syndrome.
What is twin to twin transfusion syndrome?

In all monochorionic twins there is a connection between the babies' blood circulation systems in the shared placenta. In about 15% of these pregnancies it results in one twin receiving more blood flow than the other, causing it to produce more urine than the smaller one. This creates an imbalance in the amount of amniotic fluid surrounding the twins. This can cause problems for the babies and so the pregnancy will be closely monitored by regular scans. Twin to twin transfusion syndrome is not an inherited or genetic condition. It is also not caused by anything you or you partner have or have not done. The condition and its consequences will be discussed with you at your early appointment with the consultant.

Do I need aspirin?

Aspirin is safe in pregnancy and has been shown to reduce the risk of developing Pre-eclampsia. Therefore if you have any one of the following whilst carrying twins/ triplets you are advised to take aspirin (150mg daily) for the duration of your pregnancy.

- High blood pressure, before or during pregnancy.
- Chronic kidney disease.
- Any auto-immune disease, such as antiphospholipid syndrome.
- Diabetes.
- This being your first pregnancy.
- Being over 40.
- Having a body mass index (BMI) of more than 35 (ie being obese).
- Having a family history of pre-eclampsia.

How will I be cared for?

You will be cared for by members of the multiple pregnancy multi-disciplinary team, including a Consultant obstetrician and a specialist midwife, as well as your community midwife.

See the schedule on the back of this leaflet with the anticipated pathway for your pregnancy.

Delivery of babies

Vaginal births are possible if the first baby is head down (cephalic) and there is no significant difference in the babies’ sizes or other concerns.

 Delivering twins has risks and therefore monitoring the babies closely during labour is essential to detect any problems as soon as possible.

 Vaginal delivery would not be recommended if the first twin was bottom first (breech) or in a transverse position.

 Monochorionic twins, twins who have very different estimated weights, and twins who are estimated to be larger than average, are known to have a higher risk of complications in labour and therefore there is an increased chance of needing a caesarean section.

Timing of delivery

60% of twins will deliver spontaneously before 37 weeks. A minority of twin pregnancies will go on to term. If so, early induction of labour is recommended to lessen the chance of complications. Deciding to deliver monochorionic twins after 36 weeks has not shown to increase serious adverse outcomes. However, not delivering twins by 38 weeks is associated with increase risk to the babies.

How am I cared for in labour?

Your obstetrician will recommend that you deliver your babies in hospital. In hospital medical staff are available to assist you and your babies should the need arise.

You will be scanned on admission to determine the position of the babies.

In order to assess your babies’ wellbeing whilst in labour it will also be recommended to monitor their heart rates continuously once you are in active labour. This is generally with a small electrode attached to the head of the first twin, and an abdominal transducer on your
abdomen to record the heart rate of the second twin. Listening intermittently to the heart beats alone is not enough because it is not possible to easily distinguish between the two babies. It is only possible to tell the difference between the two with electronic monitoring that shows the different pattern of heart rates.

It is also recommended that a plastic cannula (venflon) is inserted into your vein. This gives instant intravenous access if it is required.

Once labour is established and you are 3cms or more dilated an epidural is recommended.

What are my chances of a caesarean section if I go into labour?

Women who labour with twins have at least a 40% chance of needing an emergency caesarean section. Sometimes the first baby will be born vaginally, but a caesarean section is required for the second baby. The risk of a caesarean section is lower if both babies are presenting head down.

What will happen at delivery?

Generally delivery would be in a normal labour ward room. After delivery of the first baby the obstetrician will perform a scan to confirm the position of the second baby. If the second baby is in a favourable position, good contractions are then required. If there is delay of more than 30 minutes following delivery of the first baby there is a risk of complications and the need for an emergency caesarean section is increased.

If the second twin is not in a favourable position the obstetrician may attempt either external or internal movements to rotate the baby into a better position or may recommend a caesarean section. If contractions do not commence a hormonal drip is usually started once a favourable position is confirmed by ultrasound.

What about pain relief?

An epidural is recommended for a twin delivery for two reasons. Firstly that any additional movements needed for the second twin are more easily carried out if the woman is comfortable and secondly because it may be possible to use the epidural for an ‘awake’ caesarean section for which your birth partner can be present.

After delivery of the babies

There is a higher risk of bleeding after delivery of the placenta (post partum haemorrhage or PPH), due to the greater distension of the womb. Therefore after delivery a higher dose hormonal drip for four hours is advised. Waiting for spontaneous delivery of the placenta without intervention is not recommended because this is associated with a much higher risk of bleeding.

Support groups

- Twins Trust......................... 01252 332334
- Exeter Twins and Multiples Group

Useful websites

- www.twinstrust.org.uk
- www.multiplebirths.org.uk

Please detach the next 2 pages and attach to the patients’ hand held notes.
Appendix 1. Information & Management Plan for MCDA Pregnancies

Discuss the following in ANC/ FMC at 16 weeks (MC pregnancies) & 20 weeks (DC):

- **Schedule of appointments** as per Appendix 2 .................................................................
  - Blood tests as per singleton pregnancy .............................................................................

- **Anaemia** – symptoms - tiredness, shortness of breath ...................................................
  - An additional FBC at 20 -24 weeks (to identify a need for iron or folic acid) ..................

- **Pre-term birth, and use of steroids** ................................................................................
  - Report any contractions/ SROM / bleeding promptly .....................................................

- **Pre-eclampsia** – report symptoms - headache, visual disturbances, RUQ pain ...........
  - BP and urine check needed each visit .............................................................................
  - Aspirin after 12 weeks if another risk factor for pre-eclampsia (see page 1) .................

- **IUGR** – identified by scans .........................................................................................
  - MCDA – 2 weekly scans .................................................................................................

- **TTTS** - Symptoms to report- increased girth, pain, tense uterus ..................................
  - Screening for TTTS is by scan every 2 weeks from 16 weeks ........................................

- **Timing of elective delivery** ...........................................................................................
  - From 36 wks for MCDA twins .......................................................................................
  - Earlier admission / delivery if clinically necessary .......................................................

- **Delivery** – (see Appendix 3) will be in consultant unit ...............................................
  - Explanation of who will be present at delivery and their roles .........................................
  - Risks / benefits of vaginal delivery and CS discussed ...................................................
  - Epidural advisable ...........................................................................................................
  - Syntocinon infusion after delivery of first twin .............................................................

- **PPH** – Active management of 3rd stage with Syntocinon infusion ...............................
  - Iron infusion may be required, rarely a blood transfusion .............................................

This discussion has taken place at.............weeks’ gestation

Signed ......................................................

Designation ...........................................

Date ......................................................

NB: Twin pregnancy is **not** an indication for GTT
## Appendix 2. Schedule of Appointments and Scans for MCDA Pregnancies

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Monochorionic (MCDA) Twins</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-14</td>
<td>First trimester screening clinic (hospital)</td>
</tr>
<tr>
<td>16</td>
<td>Fetal medicine (FM) scan and consultant in antenatal clinic (ANC)</td>
</tr>
<tr>
<td>18</td>
<td>FM scan and consultant ANC</td>
</tr>
</tbody>
</table>
| 20     | FM and consultant ANC  
|        | Full blood count (FBC)   |
| 22     | FM scan and consultant ANC |
| 24     | FM scan and consultant ANC |
| 26     | FM scan and consultant ANC to include appointment with FMAU midwife to discuss preparation for birth and the early postnatal period. |
| 28     | FM scan and consultant ANC  
|        | FBC                      |
| 30     | FM scan and consultant ANC |
| 32     | FM scan and consultant ANC |
| 34     | FM scan and consultant ANC |
| 36     | FM scan and consultant ANC |
| 37     | Deliver by 36-37 weeks |
Appendix 3.
ANC discussion at .................. week’s gestation (aim for 30-32 weeks)

**Plans for Delivery**

Decision re mode of delivery ................................................................................................................

**If LSCS**

Date .................. Gestation .................. Steroids Y/N date ............

Plan if admitted in labour prior to this date .................................................................

**If vaginal delivery**

Induction of Labour – date booked .................. Gestation ............

Induction plan – ARM / Propess / Other ..............................................................................

Comments ......................................................................................................................................
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Please do not hesitate to ask about anything – your midwife or doctor will be happy to discuss anything that is not clear.

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