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# Management of Multiple Pregnancy

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# Management of Multiple Pregnancy

## 1. INTRODUCTION AND AIM

Twin pregnancy has an increased risk of both fetal and maternal complications. Fetal complications include miscarriage, fetal anomaly, fetal growth restriction (FGR), preterm birth, intra-uterine demise and stillbirth.

## 2. ANTENATAL CARE

### 2.1 General points

Offer women with multiple pregnancy a first trimester ultrasound scan to estimate gestational age and determine chorionicity and amnionicity following NICE guideline 137 paragraph 1.1. Gestational age should be estimated from the largest baby.

Do not use abdominal palpation or symphysis–fundal height measurements.

Fetal growth discordancy should be calculated at each visit from 24 weeks onwards and if this **exceeds 25% prompt referral** should be made to a tertiary fetal medicine unit (see 3.3 & 3.4).

There is a higher incidence of anaemia in women with a multiple pregnancy compared to a singleton pregnancy. Perform a full blood count (FBC) at the time of the anomaly USS (20-22 weeks) in addition to the routine FBC at 28 weeks.

Consider **ferrous sulphate 200mg daily** as prophylaxis for iron-deficiency anaemia. Defer until after 20 weeks if nausea and vomiting are problematic.

Measure blood pressure and test urine for proteinuria at each antenatal appointment. Assess for **low dose aspirin** and start 150mg daily from 12 weeks until the birth of the babies if any moderate or high risk factors are present in keeping with CTM Aspirin risk guideline (2022).

### 2.1.1 **Indications for referral to a tertiary level fetal medicine unit**

1. any pregnancy with a shared amnion.
2. any triplets to be referred to FMU as early as possible and ideally before 13 weeks to discuss options such as multifetal pregnancy reduction (following fetal medicine review triamniotic triplets can be cared for in CTM UHB).
3. fetal weight discordance (20% or more) **and** EFW (estimated fetal weight) of any baby below 10<sup>th</sup> centile for gestational age.
4. structural or chromosomal fetal anomaly.
5. discordant fetal death.

6. fetofetal transfusion syndrome.
7. twin reverse arterial perfusion sequence (TRAP)
7. conjoint twins or triplets.
8. suspected TAPS (see 3.4.3).

## **2.2 The team providing antenatal care**

Antenatal clinical care should be provided by a nominated **multidisciplinary team**:

- a core team: named specialist obstetrician, clinic midwife and sonographers,
- the community midwifery team,
- enhanced team for referrals dictated by each woman's needs: a perinatal mental health professional, a women's health physiotherapist, an infant feeding specialist, a dietitian.

## **2.3 The schedule of antenatal care**

To minimise the number of hospital visits and to enhance continuity of care the recommended schedule of appointments can be found in **APPENDIX A & APPENDIX B**. The topics that should be discussed during the antenatal period are included in the schedule. It is good practice to evidence this discussion has taken place, making use of **APPENDIX C**.

### **2.3.1. Monochorionic Diamniotic (MCDA) Twins**

Women with uncomplicated pregnancies should be offered at least 11 antenatal appointments with the core team of which at least 2 with the specialist obstetrician.

- appointments with scans should be offered fortnightly from 16 until 34 weeks gestation.

File **APPENDIX A** in the maternity notes. File and complete **APPENDIX C** by 28 weeks gestation.

### **2.3.2 Dichorionic Diamniotic (DCDA) Twins**

Women with uncomplicated pregnancies should be offered at least 8 antenatal appointments with the core team of which at least 2 with the specialist obstetrician.

- appointments with scans should be offered around 20, 24, 28, 32 and 36 weeks gestation.
- appointments without scans should be offered at 16 and 34 weeks gestation.

File **APPENDIX B** in the maternity notes. File and complete **APPENDIX C** by 28 weeks gestation.

### **2.3.3. Triplets**

Any triplet pregnancy should be referred to the FMU as early as possible and ideally before 13 weeks to discuss management options and plan of care.

Women with uncomplicated **trichorionic triamniotic** (TCTA) pregnancies should be offered at least 9 antenatal appointments with the core team of which at least 2 with the specialist obstetrician.

- appointments with scans should be offered around 20, 24, 26, 28, 30, 32 and 34 weeks gestation.
- appointment without scans should be offered at 16 weeks gestation.

Women with **dichorionic triamniotic** (DCTA) or **monochorionic triamniotic** (MCTA) triplets should be offered at least 11 antenatal appointments with the core team of which at least 5 with the specialist obstetrician.

- appointments with scans should be offered fortnightly from 16 until 34 weeks gestation.

#### **2.3.4. Twins and Triplets with a shared amnion (monoamniotic)**

Women with a multiple pregnancy involving a shared amnion should be referred to a tertiary level fetal medicine centre.

### **2.4 Planning and timing birth**

From 24 weeks, hold discussions with the woman and her birth partner or companion about her plans and wishes for birth. Provide tailored information to her pregnancy.

By 28 weeks discuss and evidence this discussion in the woman's notes:

- place of birth and the possible need to transfer in case of preterm birth needs to be documented clearly in the maternity notes (PCH and POW SCBU do not provide care to multiples below 34 weeks.)
- timing and possible modes of birth.
- analgesia during labour (or for caesarean birth).
- intrapartum fetal heart monitoring .
- management of the third stage of labour – recommend active management of third stage of labour.
- the potential need for blood transfusion, including the need for intravenous access.

Offer an individual assessment to determine the timing of planned birth in women with a complicated twin or triplet pregnancy, MCTA triplets or triplets with a shared amnion.

For women that decline planned birth at the timing recommended in 2.4.1-2.4.4, offer weekly appointments with the specialist obstetrician and an ultrasound scan (weekly umbilical artery Dopplers and DVP and fortnightly growth assessment).

#### **2.4.1 Uncomplicated DCDA pregnancy**

Offer planned birth at 37 weeks.

Explain:

- planned birth from 37<sup>+0</sup> weeks does not appear to be associated with increased risk of serious neonatal adverse outcomes **and**
- there is an increased risk of fetal death beyond 37<sup>+6</sup> weeks\*.

#### **2.4.2 Uncomplicated MCDA pregnancy**

Offer planned birth at 36 weeks.

Explain:

- planned birth from 36<sup>+0</sup> weeks does not appear to be associated with increased risk of serious neonatal adverse outcomes **and**
- there is an increased risk of fetal death beyond 36<sup>+6</sup> weeks\*.
- there should be a consideration for steroids in correlation with our current CTM UHB steroid guidance.

#### **2.4.3. Uncomplicated MCMA pregnancy**

These multiple pregnancies should be managed by our fetal medicine colleagues in a tertiary centre:

Offer planned birth between 32<sup>+0</sup> and 33<sup>+6</sup> after a course of antenatal corticosteroids has been considered.

Explain:

- planned birth between 32<sup>+0</sup> and 33<sup>+6</sup> weeks does not appear to be associated with increased risk of serious neonatal adverse outcomes **and**
- babies usually need admission to neonatal unit and have an increased risk of respiratory problems **and**
- there is an increased risk of fetal death beyond 33<sup>+6</sup> weeks\*.

#### **2.4.4. Uncomplicated TCTA pregnancy**

Offer planned birth at 35 weeks. Explain: continuing the pregnancy beyond 35<sup>+6</sup> weeks increases the risk of fetal death\*.

However due to complications this would need case by case discussion with a tertiary centre guided by fetal medicine team. Note that all babies below 34 weeks gestation will require birth in a level 3 unit.

#### **2.4.5. Mode of birth**

Vaginal birth and planned caesarean section are both safe choices for **DCDA and MCDA** twins if **all** of the following apply:

- pregnancy remains uncomplicated and progressed beyond 32 weeks.
- no obstetric contraindications.

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\* 'There was not enough good evidence to conclusively identify the optimal timing of birth according to chorionicity and amnionicity so the committee also used their expertise and experience to make recommendations' - NICE Guideline 137: Twin and Triplet Pregnancy (2019). Further background information on the risks can be found on [NG137 evidence reviews \(nice.org.uk\)](https://www.nice.org.uk/NG137/evidence-reviews), please refer to Appendix M within this link.

- first baby is presenting cephalic.
- no significant size discordance between twins.

Offer caesarean section to the following women:

- first baby is not presenting cephalic (DCDA and MCDA twins).
- first baby is not presenting cephalic in established preterm labour between 26 and 32 weeks (DCDA and MCDA twins).
- planned and early birth of MCMA twins.
- MCMA twins in established preterm labour and gestational age suggests there is a reasonable chance of survival of the babies.
- planned and early birth of triplets.
- triplets in established preterm labour and gestational age suggests there is a reasonable chance of survival of the babies.

Offer an individualised assessment of mode of birth to women with DCDA or MCDA twins in suspected or established preterm labour before 26 weeks taking into account the risks of caesarean section and the chance of survival of the babies.

### **3. FETAL COMPLICATIONS**

Inform women with a twin or triplet pregnancy about the complexity of decisions they may need to make depending on the outcomes of screening, including different options according to the chorionicity and amnionicity of the pregnancy.

#### **3.1 Screening for chromosomal conditions and structural abnormalities**

Offer women with a twin pregnancy information on and **screening** for Down's syndrome, Edwards' syndrome and Patau's syndrome as outlined in line with antenatal screening Wales (ASW) - [Antenatal Screening Wales - Public Health Wales \(nhs.wales\) Information for women \(sharepoint.com\)](#).

Refer women with dichorionic and monochorionic triplet pregnancies to a tertiary level fetal medicine centre at 11-13 weeks gestation to discuss management options.

Screening for triplets is not offered however a local NT measurement can be undertaken for each baby to exclude increased NT even though the actual risks for each baby will not be generated.

Do not use second trimester serum screening for Down's syndrome in triplet pregnancies.

Offer screening for structural abnormalities in multiple pregnancies as in routine antenatal care.

#### **3.2 Screening and preventing preterm birth**

Discuss higher risk of spontaneous preterm birth than with singleton pregnancy and that this risk is further increased when other risk factors are present, such as a spontaneous preterm birth in a previous pregnancy.

Explain that 60 in 100 twin pregnancies result in spontaneous birth before 37 weeks and 75 in 100 triplet pregnancies result in spontaneous birth before 35 weeks.

Explain that preterm birth are associated with an increased risk of admission to a neonatal unit.

Discuss the benefits of targeted corticosteroids. Do not use untargeted courses of corticosteroids, as there is no benefit of untargeted corticosteroids.

Do not use fetal fibronectin testing *alone* to predict the risk of spontaneous preterm birth.

Do not use home uterine activity monitoring to predict the risk of spontaneous preterm birth.

Do not offer intramuscular progesterone to prevent spontaneous preterm birth.



Do not offer the following interventions (alone or in combination) routinely to prevent spontaneous preterm birth:

- arabin pessary
- bed rest
- cervical cerclage
- oral tocolytics.

### **3.3 Diagnostic monitoring for fetal growth restriction (FGR) in dichorionic twins and trichorionic triplets**

Offer ultrasound monitoring for fetal weight discordance from 24 weeks. Use 2 or more biometric parameters and amniotic fluid levels (deepest vertical pocket (DVP) on either side of the amniotic membrane).

Continue monitoring for fetal weight discordance at intervals that do not exceed 28 days for **dichorionic twins** and 14 days for **trichorionic triplets**.

Calculate and document estimated fetal weight (EFW) discordance for **dichorionic twins**:

$$([\text{EFW larger fetus} - \text{EFW smaller fetus}] \div \text{EFW larger fetus}) \times 100$$

Calculate and document EFW discordance for **trichorionic triplets**:

$$([\text{EFW largest fetus} - \text{EFW smallest fetus}] \div \text{EFW largest fetus}) \times 100$$

AND

$$([\text{EFW largest fetus} - \text{EFW middle fetus}] \div \text{EFW largest fetus}) \times 100$$

**Refer** to tertiary level fetal medicine centre if:

- EFW discordance of 20% or more **and**
- EFW of any baby is below the 10th centile for gestational age.

This is a clinically important indicator of selective fetal growth restriction.

### **3.4 Diagnostic monitoring for complications of monochorionicity**

A monochorionic twin or triplet pregnancy is one in which any of the babies share a placenta and a chorionic (outer) membrane.

At every USS offer simultaneous monitoring for feto-fetal transfusion syndrome, fetal growth restriction and advanced-stage twin anaemia polycythaemia sequence (TAPS).

Explain that the relative likelihood of each complication changes with advancing gestation but that they can all occur at any gestational age.

### 3.4.1 Feto-fetal transfusion syndrome

Offer monitoring with USS every 14 days from 16 weeks until birth and measure DVP on either side of the amniotic membrane. As well as an umbilical PI and fetal bladders should be visualised and EFW calculated and documented.

Increase frequency of monitoring in second and third trimester to *at least weekly* if a difference in DVP depth of 4 cm or more and include Doppler assessment of the umbilical artery for each baby.

**Refer** to tertiary level fetal medicine centre if feto-fetal transfusion syndrome diagnosed:

- DVP less than 2 cm on one baby **and**
- DVP over 8 cm before 20<sup>+0</sup> weeks **or** over 10 cm from 20<sup>+0</sup> weeks on the other baby.

### 3.4.2 Fetal growth restriction (monochorionic pregnancy)

Offer ultrasound monitoring from 16 weeks to monitor for fetal weight discordance. Use 2 or more biometric parameters to calculate an EFW and amniotic fluid levels (DVP on either side of the amniotic membrane). Also middle cerebral artery pulsatility index (MCA-PI) needs to be performed from 18 weeks until 28 weeks.

Continue monitoring at intervals that should not exceed 14 days.

Calculate and document EFW discordance:

$$\frac{(\text{EFW larger fetus} - \text{EFW smaller fetus})}{\text{EFW larger fetus}} \times 100$$

Review of EFW and calculation of EFW discordance in monochorionic and dichorionic triplets should be done by the specialist obstetrician.

**Refer** to tertiary level fetal medicine centre if:

- EFW discordance of 20% or more **and**
- EFW of any baby is below the 10th centile for gestational age.

This is a clinically important indicator of selective fetal growth restriction.

### 3.4.3 Twin anaemia polycythaemia sequence (TAPS)

Offer weekly ultrasound monitoring from 16 weeks using middle cerebral artery peak systolic velocity (MCA-PSV) if the pregnancy is complicated by:

- feto-fetal transfusion syndrome treated by fetoscopic laser therapy **or**
- selective fetal growth restriction (EFW discordance of 25% or more and EFW of any of the babies below the 10th centile for gestational age)
- this would likely be performed by fetal medicine in a tertiary centre

Perform ultrasound MCA-PSV measurements to help detect advanced-stage TAPS, would be performed immediately by a tertiary level fetal medicine unit in women with a monochorionic pregnancy **and**:

- cardiovascular compromise (fetal hydrops or cardiomegaly) **or**
- unexplained isolated polyhydramnios **or**
- abnormal umbilical artery.

## **4. INTRAPARTUM CARE FOR MULTIPLE PREGNANCIES**

### **4.1 Vaginal birth of twins**

The conditions for vaginal birth are:

- pregnancy is uncomplicated and progressed beyond 32 weeks
- first twin is presenting cephalic
- no obstetric contraindications
- no overt evidence of IUGR of any twin
- second twin not considerably bigger than first twin
- not extremely preterm/low birth weight >1500g
- adequate fetal monitoring of both twins
- woman accepts risk of emergency LSCS
- appropriate staffing
- appropriate place of birth

When a woman with twins is admitted in established labour:

1. Inform obstetric staff, anaesthetic staff and neonatal staff if pre-term gestation.
2. Refer to **APPENDIX D**.
3. Determine the lie and presentation of the babies by ultrasound and/or vaginal examination.
4. The birth of all vertex/non-vertex twins should be facilitated by or under the supervision of a senior obstetrician with the appropriate skill level. Discuss the case with the Consultant Obstetrician on call to determine plan including supervision and place of birth.
5. Complete stage 0 of OBS Cymru.
6. Recommend intravenous access is gained and send sample to laboratory for group and save and FBC.
7. Ensure cross-matched or electronic issued blood is available for the woman.
8. Offer epidural analgesia to women who choose to have a vaginal birth. Explain that this is likely to
  - improve the chance of success and optimal timing of assisted vaginal birth of all the babies
  - enable a quicker birth by emergency caesarean section if needed.
9. Monitor both twins with continuous CTG monitoring.
10. Use **APPENDIX E** to document the twin birth.

## **4.2 Intrapartum monitoring**

Offer continuous cardiotocography (CTG) to women with a twin pregnancy who are in established labour and are more than 26 weeks pregnant.

Perform a portable ultrasound scan when established labour starts, to confirm which twin is which, the presentation of each twin, and to locate the fetal hearts.

Do not offer intermittent auscultation to women with a twin pregnancy who are in established labour and are more than 26 weeks pregnant.

For women between 23<sup>+0</sup> and 25<sup>+6</sup> weeks of pregnancy who are in established labour, involve a senior obstetrician in discussions with the woman and her family members or carers about how to monitor the fetal heart rates.

When carrying out CTG:

- use dual channel CTG monitors to allow simultaneous monitoring of both fetal hearts
- document on the CTG and in the clinical records which trace belongs to which baby
- monitor the maternal pulse electronically and display it simultaneously on the same CTG trace.
- Separate the fetal heart rates by 20 beats/minute or use the Huntleigh monitors, which allow the option of twin grids. Assess each CTG trace at least hourly making sure twin synchronicity is not occurring.

Classify and interpret cardiotocography in line with the health board's fetal monitoring guidance. Take into account that:

- twin pregnancy should be considered a fetal clinical risk factor when classifying a CTG trace
- Fetal scalp stimulation should not be performed in twin pregnancy to gain reassurance when a CTG trace is showing signs of (sub)acute hypoxia requiring birth to be expedited.

If abdominal monitoring is unsuccessful or there are concerns about synchronicity of the fetal hearts:

- Involve a senior obstetrician and senior midwife
- Apply a fetal scalp electrode to the first baby (only after 34 weeks and if there are no contraindications) while continuing abdominal monitoring of the second baby.
- Perform a bedside ultrasound scan to confirm both fetal heart rates.
- If monitoring remains unsatisfactory, consider a caesarean section.

After the birth of both babies, consider double clamping the cord to allow umbilical cord blood gases to be sampled. Ensure that the samples are correctly labelled for each baby.

### **4.3 Management of the second stage of labour**

#### **4.3.1 Vertex/Vertex Presentation**

Second stage must be attended by a senior midwife and the most experienced obstetrician on site. A paediatrician should be in attendance on labour ward at the time of birth. The anaesthetist should be informed.

Birth of the first twin as per singleton birth, following which an assistant stabilises the lie of twin 2 as longitudinal over the pelvic prim.

Ensure adequate fetal monitoring is maintained.

Start oxytocin augmentation if contractions have not recommenced by 10 minutes (have 10 units of syntocinon infusion prepared prior to the birth of twin 1).

An early artificial rupture of membranes (ARM) increases the risk of cord prolapse. An ARM is not recommended until the head enters the pelvis.

Consider assisted birth if second stage becomes protracted or with any signs of fetal compromise. Ideally, no more than 30 minutes should elapse between birth of twin 1 and twin 2 although up to 60 minutes is permissible provided the fetal heart is carefully monitored and is normal.

#### **4.3.2. Vertex/Non-vertex Presentation**

The birth of all vertex/non-vertex twins should be facilitated by or under the supervision of a senior obstetrician with the appropriate skill level. Discuss case with the Consultant Obstetrician on call on admission.

A paediatrician should be in attendance on labour ward at the time of birth. The anaesthetist should be informed.

Ensure adequate fetal monitoring is maintained.

Birth of the first twin as per singleton, following which examination and ultrasound scan should be performed to determine the lie of twin 2.

Encourage cephalic version of twin 2 and stabilise longitudinal lie over the pelvic brim. If the lie stabilises as breech then consider starting oxytocin augmentation if no contractions recur by 10 minutes (have 10 units of syntocinon infusion prepared prior to the birth of twin 1).

An early ARM increases the risk of cord prolapse. An ARM is not recommended until the head or breech enters the pelvis.

If the lie remains transverse perform external cephalic version (ECV) or internal podalic version (IPV) or emergency caesarean section depending on level of skill of operator.

Transverse lie with ruptured membranes should be managed by immediate caesarean section, due to the risk of cord or limb prolapse.

Ideally, no more than 30 minutes should elapse between birth of twin 1 and twin 2 although up to 60 minutes is permissible provided the fetal heart is carefully monitored and is normal.

#### **4.4 Managing the third stage of labour**

Multiple pregnancy is a risk factor for increased blood loss at birth. Ensure that stage 0 of OBS Cymru is completed on admission in labour or for planned caesarean birth. Recommend active management of third stage of labour do not recommend physiological management of the third stage to women with a twin or triplet pregnancy.

Recommend to women with a twin or triplet pregnancy active management of the third stage. Explain that it is associated with a lower likelihood of postpartum haemorrhage and/or blood transfusion.

Consider active management of the third stage with additional uterotonics (40 units of oxytocin) for women who have 1 or more risk factors (in addition to a twin or triplet pregnancy) for postpartum haemorrhage.

## **5. SUMMARY**

### **5.1 DCDA twins**

- USS at 10-13 weeks to determine viability and chorionicity - Determine chorionicity and amnionicity at the time of detecting a twin
- Offer additional appointments without scans at 16 and 34 weeks
- Structural anomaly scan at 20-22 weeks
- Discuss birth plans from 24 weeks
- Serial fetal growth scans from 24 weeks at 4 weekly intervals calculating growth discordance or more often if any evidence of FGR
- BP and urinalysis at every visit
- 34-36 weeks finalise mode and timing of birth
- Elective birth at 37-38 weeks gestation (if uncomplicated)

If planned birth at the recommended timing is declined - Offer weekly USS Doppler/ liquor and two weekly growth scans and antenatal clinic.

### **5.2 MCDA twins**

- USS at 10-13 weeks to determine viability and chorionicity
- USS for TTTS and discordant growth from 16 weeks every 2 weeks and calculate growth discordancy and refer if >25%
- Structural scan at 20-22 weeks
- Middle cerebral artery Doppler from 18 weeks every 2 weeks
- BP and urinalysis at every visit
- Discuss birth plans from 24 weeks
- 32-34 weeks finalise mode and timing of birth
- Elective birth at 36-37 weeks (if uncomplicated) – 36 weeks

If planned birth at the recommended timing is declined - Offer weekly USS Doppler/ liquor and two weekly growth scans and antenatal clinic.

## **6. USEFUL RESOURCES**

- RCOG Patient Information Leaflet - [pi-multiple-pregnancy.pdf \(rcog.org.uk\)](https://www.rcog.org.uk/patient-information-leaflets/pi-multiple-pregnancy.pdf)
- TWINS Trust – <https://twinstrust.org>
- Breast feeding – <https://breastfeedingtwinsandtriplets.co.uk>
- Pain relief for birth – <https://labourpains.org>



## **7. FUTURE ASPIRATIONS**

The department should aspire to introduce a specialist Midwife for multiple pregnancies by the next review date of this guideline in line with NICE Guideline 137 recommendation 1.3.1.

## **8. REFERENCES**

- NICE Guideline 137: Twin and Triplet Pregnancy (2019)
- PROMPT(Practical Obstetric Multi-Professional Training) Manual: third edition, PROMPT editorial team, Cambridge University Press (2017)
- Cardiff and Vale UHB Multiple Pregnancy Guideline (2020)
- RCOG Green top Guideline 51: Management of Monochorionic Twin Pregnancy (2016)

## Monochorionic Diamniotic (MCDA) Twins

Gestation	Contact	Purpose
<b>Booking visit</b> __/__/__	<b>Community Midwife</b>	Initiate pregnancy care and complete hand-held notes Arrange Dating Scan and first trimester screening Assess for Aspirin 150mg
<b>Hospital Booking visit</b> __/__/__	<b>Antenatal Clinic Midwife</b>	Review dating scan and document twin chorionicity Confirm twins-specific counselling re first trimester screening Reassess for Aspirin 150mg Perform booking blood tests and mid-stream urine
<b>16 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Discuss twin pregnancy care outline including increased risk of maternal hypertension, anaemia, preterm birth, fetal growth restriction and TTTS RCOG/Twins Trust information Chorionicity and amnionicity and risks involved needs to be discussed Antenatal check and review fetal growth scan Consider iron supplementation Document booking bloods and screening
<b>18 weeks</b> __/__/__	<b>Antenatal Clinic Midwife</b>	Review fetal growth scan Discuss preparations for coping with 2 and infant feeding - breastfeedingtwinsandtriplets.co.uk
<b>20 weeks</b> __/__/__	<b>Sonographer</b>	Fetal Anomaly Scan
<b>20 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Antenatal check and review anomaly scan Repeat FBC
<b>22 weeks</b> __/__/__	<b>Antenatal Clinic Midwife</b>	Antenatal check and review fetal growth scan
<b>23 weeks</b> __/__/__	<b>Community Midwife</b>	Antenatal check and discuss fetal movements. Refer to <b>APPENDIX C</b> (bottom row).
<b>24 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Antenatal check and review fetal growth scan
<b>26 weeks</b> __/__/__	<b>Antenatal Clinic Midwife and Health Visitor</b>	Antenatal check and review fetal growth scan
<b>28 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Antenatal check and review fetal growth scan Discontinue MCA PI if no concerns <b>Complete 28 week checklist</b> 28 week bloods
<b>30 weeks</b> __/__/__	<b>Antenatal Clinic Midwife</b>	Antenatal check and review fetal growth scan
<b>32 weeks</b> __/__/__	<b>Antenatal Clinic Midwife</b>	Antenatal check and review fetal growth scan
<b>34 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Antenatal check and review fetal growth scan Discuss and schedule mode/timing of birth at 36 weeks
<b>36 weeks</b> __/__/__	<b>Twins Clinic Consultant</b>	Antenatal check and review fetal growth scan

## Dichorionic Diamniotic (DCDA) Twins

Gestation	Specialist Contact	Purpose
Booking visit -- / -- / --	Community Midwife	Initiate pregnancy care and complete hand-held notes Arrange Dating Scan and first trimester screening Assess for Aspirin 150mg
Hospital Booking visit -- / -- / --	Antenatal Clinic Midwife	Review dating scan and document twin chorionicity Confirm twins-specific counselling re first trimester screening Reassess for Aspirin 150mg Perform booking blood tests and mid-stream urine
16 weeks -- / -- / --	Twins Clinic Consultant	Discuss twin pregnancy care outline including increased risk of maternal hypertension, anaemia, preterm birth, fetal growth restriction Consider iron supplementation RCOG/Twins Trust information Chorionicity and amnionicity and risks involved needs to be discussed Document booking bloods and screening
20 weeks -- / -- / --	Sonographer	Fetal Anomaly Scan
20 weeks -- / -- / --	Twins Clinic Consultant	Review anomaly scan Repeat FBC
24 weeks -- / -- / --	Antenatal Clinic Midwife and Health Visitor	Antenatal check and review fetal growth scan Discuss preparations for coping with 2 and infant feeding - <a href="http://breastfeedingtwinsandtriplets.co.uk">breastfeedingtwinsandtriplets.co.uk</a>
26 weeks -- / -- / --	Community Midwife	Antenatal check and discuss fetal movements. Refer to <b>APPENDIX C</b> (bottom row).
28 weeks -- / -- / --	Twins Clinic Consultant	Antenatal check and review fetal growth scan <b>Complete 28 week checklist</b> 28 week bloods
30 weeks -- / -- / --	Community Midwife	Antenatal check and discuss fetal movements
32 weeks -- / -- / --	Antenatal Clinic Midwife	Antenatal check and review fetal growth scan
34 weeks -- / -- / --	Twins Clinic Consultant	Antenatal check and discuss fetal movements Discuss and schedule mode/timing of birth at 37 weeks
36 weeks -- / -- / --	Twins Clinic Consultant	Antenatal check and review fetal growth scan

## 28 WEEK APPOINTMENT INFORMATION CHECKLIST

	Date/Signature
<p><b>Preterm birth</b></p> <ul style="list-style-type: none"> <li>• symptoms and signs</li> <li>• higher risk of spontaneous preterm birth than women with a singleton pregnancy</li> <li>• the risk is further increased if other risk factors present</li> <li>• spontaneous birth before 37/40 in 60% of twins and before 35/40 in 75% of triplets.</li> <li>• spontaneous preterm birth and planned preterm birth are associated with an increased risk of admission to a neonatal unit.with need to transfer in case of preterm birth before 34/40.</li> <li>• importance of colostrum in preterm and term twins</li> </ul>	
<p><b>Corticosteroids</b></p> <ul style="list-style-type: none"> <li>• the potential need for corticosteroids for fetal lung maturation</li> <li>• the benefits of targeted corticosteroids</li> <li>• no benefit in using untargeted administration of corticosteroids</li> </ul>	
<p><b>Timing of birth</b></p> <ul style="list-style-type: none"> <li>• uncomplicated DCDA @ 37-38 weeks</li> <li>• uncomplicated MCDA @ 36-37 weeks</li> <li>• uncomplicated TCTA and DCTA @ 35 weeks</li> <li>• if a woman declines birth at these gestations then offer weekly ultrasound and review</li> <li>• encourage antenatal expressing a week prior to planned birth date and discuss the importance of breastfeeding. <a href="https://breastfeedingtwinsandtriplets.co.uk">https://breastfeedingtwinsandtriplets.co.uk</a></li> </ul>	
<p><b>Mode of birth</b></p> <p>In an uncomplicated twin pregnancy planned vaginal birth and planned caesarean section are both safe choices if all of the following apply:</p> <ul style="list-style-type: none"> <li>• the pregnancy remains uncomplicated and has progressed beyond 32 weeks</li> <li>• there are no obstetric contraindications to labour</li> <li>• the first baby is in a cephalic presentation</li> <li>• there is no significant size discordance between the twins.</li> </ul> <p>In an uncomplicated twin pregnancy giving birth after 32 weeks:</p> <ul style="list-style-type: none"> <li>• more than a third of women who plan a vaginal birth go on to have a caesarean section (40%)</li> <li>• almost all women who plan a caesarean section do have one, but a few women have a vaginal birth before caesarean section can be carried out</li> <li>• a small number of women who plan a vaginal birth will need an emergency caesarean section to deliver the second twin after vaginal birth of the first twin (5%)</li> </ul>	
<p><b>Analgesia during labour (or for caesarean section)</b> <a href="https://labourpains.org">https://labourpains.org</a></p> <p>Offer an epidural to women who choose to have a vaginal birth. This is likely to:</p> <ul style="list-style-type: none"> <li>• improve the chance of success and optimal timing of assisted vaginal birth of all babies</li> <li>• enable a quicker birth by emergency caesarean section if needed.</li> </ul> <p>Offer regional anaesthesia to women with a twin or triplet pregnancy who are having a caesarean section.</p>	
<p><b>Intrapartum continuous fetal heart monitoring - CTG</b></p> <ul style="list-style-type: none"> <li>• the recommendations on CTG are based on evidence from women with a singleton pregnancy because there is a lack of evidence specific to twin pregnancy or preterm babies</li> <li>• CTG allows simultaneous monitoring of both babies</li> <li>• CTG might restrict mobility</li> <li>• normal traces show the babies are coping well with labour; if traces are not normal, there will be less certainty about the babies' condition</li> <li>• it is normal to see changes to the fetal heart rate pattern during labour and this does not necessarily mean there is a problem</li> <li>• findings from the CTG are used to help make decisions during labour and birth, but these will also be based on the woman's wishes, her condition and that of her babies.</li> </ul>	
<p><b>Management of the third stage of labour</b></p> <ul style="list-style-type: none"> <li>• multiple pregnancy is a risk factor for increased blood loss at/after birth</li> <li>• options for managing the third stage of labour - recommend active management of the third stage as this is associated with a lower risk of postpartum haemorrhage and/or blood transfusion.</li> <li>• discuss the potential need for blood transfusion, including the need for intravenous access.</li> </ul>	
<p>Signpost the woman to their <b>community and antenatal clinic midwife and health visitor</b> to discuss: mental health and wellbeing, nutrition, infant and breast feeding, safer sleep postnatal contraception and parenting. Please refer to the Midwifery/Health Visiting Services Multiple Birth Pathway.</p>	

## PROMPT Twin Checklist on Admission to Labour Ward

Twin birth: Checklist on admission to labour ward		
Attach inpatient ID label:	Tick when Completed	Comments
Introduce the parents to the team.		
Review the handheld and hospital notes including the care plan to identify any antenatal risk factors.		
Explain the plan for birth.		
Establish intravenous access, take blood for full blood count (FBC) and group and save (G&S).		
Once in established labour clear fluids only and start gastric protection (e.g. oral Ranitidine 150 mg six-hourly).		
Confirm presentation of both twins with ultrasound.		
Continuous electronic fetal monitoring is recommended:		
<ul style="list-style-type: none"> <li>• A scalp electrode may be used for twin I to help differentiate the fetal heart recordings.</li> </ul>		
<ul style="list-style-type: none"> <li>• Ultrasound can be used to identify the optimal location placement of the EFM transducers.</li> </ul>		
<ul style="list-style-type: none"> <li>• A suitable monitor should be used to enable the differentiation of the two fetal heart tracings.</li> </ul>		
Discuss analgesia. An epidural is helpful as it will make any intrauterine manipulation of twin II easier and can be used for caesarean section if needed.		
Obstetrician to document a care plan for twin birth in the handheld record.		
Date:	Name:	Signature:
		Grade:

## PROMPT Twin Birth Proforma



Twin birth – Documentation pro forma			
<b>Name:</b>	<b>Hospital Number:</b>		<b>Date:</b>
<b>Gestation:</b>			<b>Comments:</b>
<b>Chorionicity</b>	Dichorionic/diamniotic or Monochorionic/diamniotic		
	<b>Twin I</b>	<b>Twin II</b>	
<b>Presentation at start of 2nd stage</b>	Cephalic Breech Other	Cephalic Breech Other	
<b>CTG</b>	Normal Suspicious Pathological	Normal Suspicious Pathological	
<b>Syntocinon infusion to augment labour?</b>	Yes No	Yes No	
<b>Analgesia</b>	None Entonox Epidural Spinal GA	None Entonox Epidural Spinal GA	
<b>IV access?</b>	Yes No If no, reason for no access:		
<b>Ranitidine?</b>	Yes: oral IV No		
<b>Senior midwife present?</b>	Yes Name: No		
<b>Obstetric registrar (ST3–5) present?</b>	Yes Name: No		
<b>Senior obstetric registrar (ST6–7)?</b>	Yes Name: No		
<b>Consultant obstetrician present?</b>	Yes Name: No		
<b>Experienced neonatologist present at birth?</b>	Yes Name: No		
<b>Mode of birth twin I</b>	Spontaneous vaginal Ventouse	Forceps Caesarean section	
<b>Time:</b>			
<b>Syntocinon infusion between twins?</b>	Yes	No	
<b>Mode of birth twin II</b>	Spontaneous vaginal Ventouse Forceps	Caesarean section Assisted breech Breech extraction	
<b>Time:</b>			
	<b>Twin I</b>	<b>Twin II</b>	
<b>Presentation at birth</b>	Cephalic Breech Other	Cephalic Breech Other	
<b>Internal or external manoeuvres performed</b>	Yes: No	Yes: No	
<b>Cord gases taken?</b>	Yes No	Yes No	
<b>Apgars (at 1, 5, 10 minutes)</b>			
<b>Placenta complete? (Placenta should be sent to histology)</b>	Yes: No:	Yes: No:	
<b>Syntocinon infusion commenced after third stage?</b>	Yes: No:		
<b>Date:</b>	<b>Name:</b>	<b>Signature:</b>	<b>Grade:</b>