DCDA twin pregnancy care plan MATF138	
Type: Care Plan	**HDSS Certification Standard** [optional]
Issued by: Hutt Valley Maternity PPG Group	**Version:** 1.2
Applicable to: Hutt Valley District only	**Contact person:** SMO O & G/Midwifery Educator
Document Owner: CHOD O & G	**Senior Document Owner:** Director of Midwifery
Lead District: Hutt Valley	

Purpose:

This is a recommended guideline for the antenatal care of any Dichorionic Diamniotic (DCDA) twin pregnancy, but needs to be individualised for the pregnant person.

Scope:

For the purposes of this document, staff will refer to:

All staff within Te Whatu Ora – Health New Zealand Capital, Coast and Hutt Valley. This includes staff not working in direct contact with patients/consumers. Staff are taken to include anyone engaged in working for the Hutt hospital. This may include but is not limited to:

- Employees irrespective of their length of service
- Agency workers
- Self-employed workers
- Volunteers
- Consultants
- Third party service providers, and any other individual or suppliers working in Hutt Maternity, including Lead Maternity Carers, personnel affiliated with third parties, contractors, temporary workers and volunteers
- Students

Points of care for DCDA twins

DCDA twins are a **transfer of care** to Secondary Care (MOH 2012) – early Obstetric review is important
LMCs must recommend transfer of clinical responsibility from the LMC to a Specialist, although LMCs may retain their role providing Primary Care for the pregnant person if not transferring this to the Community Midwifery Team

- If the pregnant person declines referral to Secondary Care, they ought to be informed that this is their right.

- LMCs can follow the care plan, but discussion with Obstetric Team is also recommended.

MFM consultation or referral (possibly urgent) is indicated for fetal anomaly, selective FGR (sFGR) or fetal demise of one twin
GROW charts are non-validated for use in twin pregnancy. Recommended to use in conjunction with non-customised growth chart (especially Intergrow 21).

ANTENATAL CARE PLAN

Week	Care Level	☑	RECOMMENDATION	
Booking	1°	☐	Routine antenatal booking and care	
		☐	Viability scan: dating, labelling of twins, chorionicity (treat as MCDA if any doubt) ± NT	
		☐	Measure the pregnant person's height and weight, and **create GROW chart** • Allows correct identification of BMI • Allows identification of previous SGA / FGR / LBW	
		☐	Transfer of antepartum and intrapartum care to Secondary Care (LMC may retain Primary Care role)	
		☐	Recommend **folic acid 5mg daily** and **iodine 150 mcg daily**	
		☐	Consider offering **aspirin 100mg daily** from 12 to 36 weeks – organise through MAU	
		☐	Offer **influenza vaccination** at any point in pregnancy	
		☐	Review modifiable risk factors: cigarette smoking, recreational drug use, obesity (limiting weight gain)	
		☐	Review if other venous thromboembolism risk factors – if potentially ought to be started on antenatal Clexane, mention this on referral (RCOG GTG 37a)	
9 – 13	1°	☐	Offer MSS 1 combined screening (recommend NT scan even if declines as increased risk of fetal anomaly)	
12 – 14	2°	☐	Secondary care review and pregnancy care plan to be made	
14 – 20	1°	☐	Offer MSS 2 combined screening (if not done MSS 1)	
		☐	Offer **pertussis vaccination** from 16 weeks	
20-22	2°	☐	Anatomy scan: growth, SDP, UA PI & cervical length	Obstetric ANC clinic review
20-22	1°	☐	Review by LMC / CMT	

24	2°	☐	Scan: growth, SDP & UA PI	Obstetric ANC clinic review
26 – 28	2°	☐	Glucose tolerance test (not Polycose) recommended	
26	1°	☐	Review by LMC / CMT	
28	2°	☐	Scan: growth, SDP & UA PI	Obstetric ANC clinic review
28 – 32	2°	☐	Offer **pertussis vaccination** if not already done	
		☐	Birth plan – three-way consultation with women, Obstetric, LMC/Hospital Midwives	
30	1°	☐	Review by LMC / CMT	
32	2°	☐	Scan: growth, SDP & UA PI	Obstetric ANC clinic review
34	1°	☐	Review by LMC / CMT	
36	2°	☐	Scan: growth, SDP & UA PI	Obstetric ANC clinic review
37-38	2°	☐	Recommend birth – induction of labour (IOL) or CS as indicated (aim birth by 38 weeks)	

CALCULATING GROWTH DISCORDANCE

$$\frac{Big\ EFW - Small\ EFW}{Big\ EFW} \times 100 = \%\ Growth\ Disrecpancy$$

≥25% discrepancy is statistically significant for selective fetal growth restriction (sFGR); Consider consultation ± referral to MFM for sFGR

SHORTENED CERVIX

Offering vaginal progesterone (**Utrogestan 200mg PV at night** – needs PHARMAC Special Authority) to asymptomatic people with a twin pregnancy and a cervix <25mm on transvaginal ultrasound scan, reduced the risk of preterm birth occurring at <30 and <35 weeks, neonatal mortality and some measures of neonatal morbidity, without any demonstrable deleterious effects on childhood neurodevelopment. (Romero 2017)

MODE OF BIRTH

Vaginal birth recommended	Leading / presenting twin is cephalic
Caesarean birth recommended	Leading twin is non-vertex sFGR, especially if leading twin is the smaller

BIRTH PLAN

Birth plan needs to be carefully discussed and documented antenatally by both Obstetric and Midwifery staff

Establish whether LMC wishes to be involved in birth

Offer early epidural, as it is useful if internal manoeuvres are required for the birth of the second twin (more common if second twin non-vertex) or needs an urgent Caesarean birth (more likely to need a general anaesthetic if no epidural)

- Support the decision of people who do not opt for an epidural in labour

Inform the pregnant person of 4% risk of needing Caesarean birth for second twin following vaginal birth for the first (Barrett 2013)

INTRAPARTUM CARE

Inform on-call **Obstetric RMO,** Anaesthetic Registrar and Theatre Co-ordinator on admission (and liaise with **Obstetric SMO**)

Inform on-call **Paediatric Registrar** on admission, and ensure SCBU beds are available

IV access on admission, and send FBC and Group & Hold

If doubts about fetal presentation, confirm with bedside ultrasound scan

Ensure roles for Obstetric and Midwifery staff are discussed and agreed

- Still under Secondary Care and labour care should be overseen by Obstetric staff
- Midwifery care can be provided by LMC midwife with Core Midwifery support, or by Core Midwives alone
- One-to-one midwifery intrapartum care advised

Continuous CTG recommended

If a CTG becomes abnormal for one or both twins, contact ACMM and Obstetric RMO (not SHO) or SMO immediately

Consult with anaesthetics if aspiration prophylaxis required

AT FULLY DILATED

Inform **Obstetric RMO and SMO**

Paediatric RMO and **SCBU Nurse** attendance at birth indicated for all dichorionic twin births, irrespective of mode of delivery

Inform **Theatre Co-ordinator** and **Anaesthetic RMO** in case need urgent transfer to theatre (consider doing this earlier in labour too)

Prepare room for birth: including two resuscitation stations, ultrasound scanner in room, oxytocin augmentation preparation

BIRTH OF SECOND TWIN

Obstetric SMO to be present on Birthing Suite prior to birth of first twin if possible, or as soon afterwards as safely possible

After birth of first twin, options include stabilising the lie of the second twin (using ultrasound as a guide) until engaged; ARM if cephalic; ECV or IPV if appropriate; breech extraction if in non-vertex lie

Monitor fetal heart rate of the second twin using continuous CTG

Expedite the delivery of the second twin if concerns about fetal distress – by Caesarean if needed

The interval between birth of the two twins is determined by the wellbeing of the second twin

- If there are concerns with the CTG – delivery needs to be expedited
- Oxytocin for augmentation is appropriate to stimulate effective contractions in order to minimise the inter-twin birth interval

If birth needs expediting and/or baby non-vertex, consider internal podalic version (IPV) and breech extraction, or external cephalic version (ECV)

Active third stage of labour – **Syntocinon 5 units IV or 10 units IM**, and consider a prophylactic **Syntocinon infusion 40 units in 1000ml Normal Saline over 4 hours. Monitor for PPH.**

CORD CLAMPING

There is some weak evidence to support that delayed cord clamping for the first twin in DCDA twins is reasonable, but need to consider the simultaneous needs of second twin, which may be to expedite birth. (Use 2 x clamps for second twin).

References:

Barrett J et al. A randomized trial of planned caesarean or vaginal birth for twine pregnancy. *N Engl J Med* 2013;369:1295-305 doi

Khalil A etal. ISUOG Practice Guidelines: role of ultrasound in twin pregnancy. *Ultrasound Obstet Gynecol* 2016; 47: 247-263 doi

Ministry of Health. 2012. *Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines)*. Wellington: Ministry of Health doi

NICE Clinical Guideline 129 – Multiple pregnancy: antenatal care for twin and triplet pregnancies. 2011. doi

Romero R et al. Vaginal progesterone decreases preterm birth and neonatal morbidity and mortality in women with a twin gestation and a short cervix: an update meta-analysis of individual patient data. *Ultrasound Obstet Gynecol* 2017;49(3):303-312 doi

Royal Australian and New Zealand College of Obstetricians and Gynaecologists C-Obs 42 Guideline – Management of monochorionic twin pregnancy. 2014. doi

Keywords for searching:

1. Dichorionic diamniotic
2. DCDA
3. Twins
4. Care plan

Informed Consent

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a pregnant person can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012).

Tangata Whenua Statement

The Women's Health Service recognises the rights and responsibilities of Māori as tangata whenua and Treaty Partners. This allows and acknowledges the importance of cultural diversity in all aspects of our care and practice in Aotearoa New Zealand.

As stated in Te Pae Amorangi (Hutt Valley Māori Health Strategy) 2018-2027, Te Whatu Ora Capital, Coast and Hutt Valley as a Crown agency is committed to our role in maintaining active relationships with iwi, under Te Tiriti o Waitangi. This strategy recognises the established principles of Partnership, Participation and Protection and recognises steps towards the reviewed interpretation of Te Tiriti principles to date (from the Wai 2575 claim into health). These are tino rangatiratanga, equity, active protection, partnership and options.

Attention in particular is drawn to:

- **Article one – Kāwanatanga**: actively engaging and working alongside with local iwi through the Hutt Valley Māori Health Unit
- **Article two – Tino Rangatiratanga**: Self-autonomy, self-determination; the responsibility to enable Māori to exercise their authority over their own health, determinants and definition of health
- **Article three – Ōritetanga**: equal health outcomes of peoples; ensuring that policy, guidelines or programmes do not further perpetuate any inequity
- **Article four (the 'oral clause') – Wairuatanga**: spirituality; thriving as Māori and the importance of health providers understanding health in te ao Māori (the Māori world), acknowledging the interconnectedness and inter-relationship of all living and non-living things.