Government of Western Australia
North Metropolitan Health Service
Women and Newborn Health Service

OBSTETRICS AND GYNAECOLOGY CLINICAL PRACTICE GUIDELINE	
# Cord prolapse: Umbilical	
Scope (Staff):	WNHS Obstetrics and Gynaecology Directorate Staff
Scope (Area):	Obstetrics and Gynaecology Directorate clinical areas at KEMH and OPH
This document should be read in conjunction with the Disclaimer.	

Cord prolapse management algorithm

RECOGNISE PROLAPSE UMBILICAL CORD
- Umbilical cord visible/protruding from vagina
- Cord palpable on vaginal examination
- Abnormal fetal heart rate on auscultation

CALL FOR HELP
- In hospital: **Dial 55 – call for Code Blue - Caesarean or Medical**
- Outside of hospital / in community: **Dial 000 – Call for emergency**

RELIEVE PRESSURE ON THE CORD
- Manually elevate presenting part
- Position woman:
  - Knee chest position OR
  - Left lateral position with pillow placed under left hip (and head-down if possible)
  - Suggest bladder-filling if a delay expediting birth is anticipated; apply **dry** pad to try to keep cord inside vagina
- Consider tocolysis (e.g. with subcutaneous terbutaline 0.25mg)

Consider clinical circumstances, environment and urgency

PREPARE FOR URGENT BIRTH
- Emergency transfer to hospital if in a community setting
- Secure IV access/take bloods
- Continuously monitor fetal heart rate (if in hospital)

Consider clinical circumstances, environment and urgency

BIRTH
- Assess and assist birth by the most appropriate means
- Urgency of birth is dependent on fetal heart rate and gestational age
- If vaginal (spontaneous / assisted) birth:
  - **Dial 55 – call for Code Blue - Medical**
- If caesarean birth necessary:
  - **Dial 55 – call for Code Blue - Caesarean**
- Consider delayed cord clamping if possible and appropriate
- Neonatologist to be present at birth:
  - Consider **Dial 55 – call for Code Blue - Paediatric**

POST BIRTH
- Paired umbilical cord gases
- Documentation
- Debrief mother and relatives
- Debrief staff involved

Acknowledgment to (edited to align to WNHS model of care):
Practical Obstetric Multi-Professional Training (PROMPT) Maternity Foundation. (2023). Management Algorithm for Umbilical Cord Prolapse. Prompt Annual Update 2022/23: Cord Prolapse Module.

Aim

To guide for management of umbilical cord prolapse.

Definitions[2]

Cord presentation	the umbilical cord lies in front of the presenting part, with the fetal membranes still intact.
Cord prolapse	the cord lies in front of the presenting part and the fetal membranes are ruptured.
Occult cord prolapse	this is said to occur when the cord lies alongside, but not in front of, the presenting part.

Key points

1. All women who are high risk for cord prolapse should immediately have a speculum examination and / or digital vaginal examination following spontaneous rupture of membranes[1]
2. Management of cord prolapse depends on parental/medical consultation which includes fetal gestation.
3. If no cord pulsation or fetal heart rate is heard, the presence or absence of a fetal heart rate should be confirmed by Ultrasound Scan.
4. Manual elevation of the fetal presenting part decompresses cord occlusion[1]
5. Reduce potential umbilical cord spasm by minimal handling of the cord[1] and prevention of the cord becoming cold or drying[2]
6. If delay in birth is expected, catheterisation of the bladder (bladder filling) may be performed. 500 mL - 750 mL of Sodium Chloride 0.9% is infused into the bladder and the catheter is clamped. This elevates the presenting part[1] , replacing the need for manual elevation. Once bladder filling is performed, consider applying a dry pad to try and keep cord inside vagina. It is essential to empty the bladder again just before birth.
7. Delay in delivery time interval may increase the risk of perinatal morbidity and mortality.

Management of cord prolapse

Less than 23 weeks gestation:

- The gestation is below viability – do **NOT** call an emergency code.
- Notify the obstetric medical team.

Equal to or more than 23 weeks gestation:

1. **Call assist bell**
2. **Relieve pressure on the cord**
   - 2.1 Maternal position - cord compression can be further reduced by the mother adopting the knee-chest, face-down or left lateral (preferably with head down and pillow under the left hip) position[1].
   - 2.2 Manually elevate the presenting part, assess pulsation of cord.
3. **Fetal assessment**
   - 3.1 Auscultate the fetal heart rate as soon as possible.
   - 3.2 Continuous fetal heart rate monitoring should be initiated.
   - 3.3 An ultrasound should be done immediately if:
     - No cord pulsation can be felt.
     - Fetal heart rate cannot be found on auscultation.
4. **Birth**

   If the cervix is fully dilated:
   - Consider assisted consider assisted vaginal birth if it can be accomplished quickly and safely.
   - Consider Dial 55 – call for Code Blue – Medical

   If birth is not imminent and the fetus is viable:
   - Prepare woman for theatre (caesarean section) and transfer.
   - Dial 55 – call for Code Blue – Caesarean
5. **Note the time the Code Blue is called**
6. **Intravenous therapy (IVT)**
   - If intrapartum, cease Oxytocin infusion immediately.
7. **Terbutaline**
   - Consider administration of terbutaline 250 Micrograms subcutaneously if women contracting.
8. **Documentation**
   - Detailed notes of the incident should be documented in the medical record.
9. **Support and debriefing**
   - Explanation of the management should be given to the woman and support people during the incident as appropriate.

Cord prolapse in the community

Management

1. Call 000 and the support midwife if not already present
2. Follow Management of Cord Prolapse >23 weeks as applicable to the community setting.
3. Inform the closest obstetric hospital of the imminent transfer for cord prolapse. Ensure immediate transfer on arrival of ambulance
4. Explain the circumstance to the woman in a calm manner and reassure her
5. Consider: If delay in birth is expected while waiting for the ambulance, catheterisation of the bladder should be performed. 500mL of Sodium Chloride 0.9% is infused into the bladder and the catheter is clamped; this elevates the presenting part[1] and may reduce contractions.
6. Transfer to the closest Obstetric Hospital.

References

1. Royal College of Obstetricians and Gynaecologists. Umbilical cord prolapse: Green-top guideline No.50. 2024. Available from: http://www.rcog.org.uk/guidance/browse-all-guidance/green-top-guidelines/umbilical-cord-prolapse-green-top-guideline-no-50/
2. Practical Obstetric Multi-Professional Training (PROMPT) Maternity Foundation. (2023). Management Algorithm for Umbilical Cord Prolapse. Prompt Annual Update 2022/23: Cord Prolapse Module.
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Related WNHS policies, guidelines and procedures

- WNHS Obstetrics and Gynaecology Clinical Guidelines including WNHS Obstetrics and Gynaecology: Acute Deterioration (Adult): Resuscitation And Life Support
- WNHS Policy: Recognising and Responding to Acute Clinical Deterioration (Physiological and Mental Health)

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Version history

Version Number	Date	Summary
1	Dec 2014	First version. **History**: In Dec 2014, two guidelines dating from 2001, on cord prolapse were joined. **Superseded**: 1. B11.3.1 Cord Prolapse on Wards 2. B11.3.2 Cord Prolapse in LBS Contact OGD Guideline Coordinator for archived versions.
2	July 2018	'CMP Cord Prolapse' guideline content moved into this document
3	Apr 2025	• Major review of content in line with international guidelines. • Quick reference guide algorithm update: Position of the woman changed from exaggerated SIMs position, to knee-chest, face-down or left lateral position with hips raised. • Inclusion (with permission) from Practical Obstetric Multi-Professional Training (PROMPT) Maternity Foundation to use "Management Algorithm for Umbilical Cord Prolapse" and edited to align to WNHS model of care, including Calling Code Blue • Updated links, references and content refreshed and formatted to meet KEMH and OPH requirements.

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