MATERNITY UNIT

GUIDELINE: CORD PROLAPSE

AUTHOR: Midwifery Educator

SCOPE: This guideline applies to all midwives and obstetricians working in the maternity services.

PURPOSE: To provide guidance on the management of cord prolapse and therefore improve perinatal outcome and to ensure compliance with current evidence based practice.

DEFINITIONS: Cord prolapse is a rare obstetrical emergency that occurs when the umbilical cord descends alongside (occult) the presenting part, or past the presenting part (overt). Cord presentation is when the membranes are intact and the cord is felt alongside or below the presenting part on vaginal examination.

GUIDELINES
Contents:
1. Risk factors
2. Fetal risk
3. Incidence
4. Emergency management of cord prolapse

Risk Factors
Risk factors are divided into two categories, general and procedure related. General: polyhydramnios, multiparity, low birth weight, prematurity, congenital anomalies, high presenting part, malpresentation, second twin, contracted pelvis, pelvic tumours, expectant management of premature rupture of membranes, unstable lie
Procedure related: ARM, FSE application, external cephalic version, rotational instrumental delivery

Fetal Risk
Compression of cord between fetus and bony pelvis
Spasm of cord vessels when exposed to cold or manipulation
Fetal death

Incidence
Ranges from 0.1 - 0.6% of all births (1% breech presentations)

Emergency management of cord prolapse
Need to confirm baby is alive and a viable gestation.
To ensure accurate records of the response, actions and times of this event are recorded, document on a Cord Prolapse proforma and then enter details in the woman’s MCIS records after the event. An incident form will also be required to be completed after the event.

3 principles of management – Recognise
   Relieve
   Remove

(See Appendix one for flowchart)

**Recognise**
- Early recognition is vital
- Visible cord at introitus
- Vaginal examination – pulsating cord
- Abnormal CTG (variable decelerations 60-70% of cases, bradycardia 30-40% of cases)
- Ultrasound examination – to confirm fetal heart present or absent. Can be used to confirm cord presentation

Even when absence of cord pulsation and inaudible heart tones, fetal heart movements may be visualised on scan

Call for emergency help – Dial 777 – request on call obstetrician and paediatrician

**Relieve Pressure on Cord**
- If syntocinon infusion running, then stop this immediately
- Place hand in vagina and keep presenting part elevated
- Place woman in knee-chest face-down position, elevate foot of bed, manual elevation of presenting part away from cord, keep cord in vagina if possible and prepare for emergency caesarean. Little evidence to support applying warm moist cloth to cord.
- Alternatively, place the woman in the exaggerated Sims position, use a wedge
- Consider bladder filling as it elevates the presenting part off the cord and therefore manual elevation is no longer required and uterine activity is reduced. It can also enable a safer transfer to theatre on a bed/trolley and can be beneficial if there is any anticipated delay in transferring the woman to theatre.

**Bladder filling** – all required equipment is in cord prolapse drawer on the emergency red trolley. Insert a 16fg catheter into bladder and inflate 10 ml balloon, connect an IV infusion set to a 1 litre bag of Normal Saline and connect to catheter drainage tube, apply pressure bag to fluid or squeeze manually to rapidly fill the bladder until visible abdominally, then attach spigot to keep fluid in bladder but ensure you take a drainage bag to attach in theatre when ‘knife to skin’ to quickly drain bladder.
- Consider tocolysis
Remove

- Prepare for a category 1 caesarean section (<30 mins)
- Complete the Red crash section pre-op checklist form
- Continuous CTG until delivered
- If fully dilated, a vaginal birth may be the quickest and safest route, especially in multiparous women. The fetal head must be low in the pelvis for this to be considered.

If fetus dead:
Confirm intrauterine death with ultrasound and await spontaneous birth.

If fetus alive and immediate vaginal delivery not possible:
Perform manoeuvres to keep pressure off cord until delivery. Continuous fetal monitoring. Maternal oxygen via facemask, cannulate, take CBC, Group and Screen and commence IV fluids. Complete Red crash LSCS pre-op checklist ready for LSCS.

*Remember cord prolapse is a frightening experience for the woman and her whanau so keep them informed of proceedings and debrief after the event. Staff should also have the opportunity of debriefing.*

ASSOCIATED DOCUMENTS
Emergency - Obstetric and Neonatal guideline

EVALUATION METHOD
All cases to be Incident reported and case reviewed

REFERENCES


**Authorised by (HOD Obstetrics)**

**Authorised by (Clinical Care Manager Woman Child \\& Youth)**

**Date of Approval:** ___/____/____

**Next Review Date:** ___/____/____

**APPENDIX ONE**

- **Recognise**
  - Cord visible/protruding from vagina
  - Cord palpable on vaginal examination
  - Abnormal fetal heart on auscultation/CTG

- **Call for help**
  - Woman into left lateral position with head down and pillow placed under left hip
  - Knee/chest position
  - Manually elevate presenting part
  - Consider bladder filling
  - Consider tocolysis

- **Relieve**

- **Remove**
  - Emergency transfer to hospital labour ward
  - Assess and assist birth by quickest means