# Guideline for the Management of Cord Prolapse

| | |
|---|---|
| Specialty: | Maternity |
| Author: | Laura Rose |
| Date Approved: | 24/07/24 |
| Approved by: | Labour Ward Forum |
| Date for Review: | July 2027 |

## Definition

Cord prolapse is when a loop of umbilical cord descends through the cervix either alongside the presenting part (occult) or below the presenting part (overt) in the presence of ruptured membranes[1].

## Incidence

Occurs in 0.1-0.6% cases. 50% are preceded by an obstetric intervention.

## Risk factors

Fetal

- Congenital anomaly
- Prematurity <37 weeks
- Polyhyramnios
- Multiple pregnancy (second twin)
- Breech presentation
- Transverse, oblique or unstable lie
- Unengaged presenting part
- Low birth weigh <2.5kg

Maternal

- Grand multip
- Placenta praevia
- Long cord/cord presentation

Procedure related

- External Cephalic Version (ECV)
- Artificial rupture of membranes/stabilizing induction
- Vaginal manipulation of the fetus in the presence of ruptured membranes i.e. Internal podalic version
- Disimpaction of the fetal head during assisted vaginal birth or other manipulation of the fetal head.
- Large balloon catheter for induction of labour.

Women/birthing people with transverse/oblique/unstable lie should be offered admission to the maternity ward after 37+0 weeks gestation.

Patients with a non-cephalic presentation and preterm pre-labour rupture of the membranes should be offered admission to the maternity ward.

Avoid artificial rupture of membranes if presenting part is mobile.

## Diagnosis

Can occur in the presence of a normal fetal heart rate pattern.

If risk factors are present as above and a spontaneous rupture of the membranes occurs +/- acute change in fetal heart rate pattern, a vaginal examination should be performed with consent to exclude cord prolapse.

Cord prolapse should be diagnosed by either visualising the cord protruding from the vagina or by palpation of the cord during vaginal examination

In preterm cases where cord prolapse is suspected with an intact amniotic sac, ultrasound may be used to exclude/confirm this.

Ultrasound may be required to confirm fetal heart activity.

Management

- Call for help – emergency buzzer, dial 2222 stating Obstetric emergency and the location. Ensure the neonatal team are also alerted. If in the community setting dial 999 for ambulance.
- Using sterile gloves keep a hand in the vagina to elevate the presenting part and relieve the pressure on the cord
- Minimise handling of the cord to avoid vasospasm. If outside vagina gently replace into vagina with warm pad or swab.
- Place patient into head down tilt or knees to chest position, ideally in left lateral position with raised hips.
- Consider filling the bladder with 500ml normal saline via Foley catheter and blood giving set and clamp. Remove and drain bladder prior to an attempt at delivery.
- Consider tocolysis (0.25mg terbutaline s/c) if uterine contractions present
- Secure IV access
- Continuously monitor the fetal heart.
- Category 1 LSCS recommended in the presence of fetal heart rate abnormalities.
- Operative vaginal delivery can be considered if fully dilated and quick delivery anticipated.
- Breech extraction can be performed in some circumstances i.e. After internal podalic version of the second twin.
- Category II LSCS may be appropriate if normal fetal heart rate

- Type of anaesthesia (epidural to-up / spinal / GA) to be decided on discussion with the anaesthetist and dependent on clinical factors i.e. fetal heart rate
- A practitioner competent in neonatal resuscitation should be present at delivery.
- Paired cord blood samples should be taken.
- Postnatal debriefing should be offered to patient
- Complete a datix incident from

## References


1. RCOG Greentop Guideline (2014) Umbilical Cord Prolapse
2. PROMPT

# Management Algorithm for Umbilical Cord Prolapse

## RECOGNISE PROLAPSED UMBILICAL CORD

- Umbilical cord visible/protruding from vagina
- Cord palpable on vaginal examination
- Abnormal fetal heart rate on auscultation/CTG

## CALL FOR HELP

Emergency buzzer in hospital/dial 999 for ambulance if outside hospital

## 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 in expediting birth is anticipated and apply a dry pad to try to keep cord inside vagina
- Consider tocolysis (e.g. with subcutaneous terbutaline 0.25mg)

**Consider clinical circumstances, environment & urgency**

## PREPARE FOR URGENT BIRTH

- Emergency transfer to hospital if in a community setting
- Inform:
  - Experienced Midwifery staff
  - Senior Obstetrician
  - Anaesthetist
  - Theatre team
  - Neonatal team
- Secure IV access/take bloods
- Continuously monitor fetal heart rate (if in hospital)

**Consider clinical circumstances, environment & urgency**

## BIRTH

- Assess and assist birth by the most appropriate means
- Urgency of birth is dependent on fetal heart rate and gestational age (consider Category 2 birth if FHR normal)
- If caesarean birth necessary – consider regional anaesthesia if appropriate
- Consider delayed cord clamping if possible and appropriate
- Neonatologist to be present

## POST BIRTH

- Paired umbilical cord gases
- Documentation (proforma) and Clinical Incident Report
- Debrief mother and relatives
- Debrief staff involved

# Community Algorithm for Management of Umbilical Cord Prolapse

## RECOGNISE PROLAPSED UMBILICAL CORD

- Umbilical cord visible/protruding from vagina
- Cord palpable on vaginal examination
- Abnormal fetal heart on auscultation

Time/Comments

## CALL FOR HELP

- Emergency call bell (FMU)
- 999 – Paramedic ambulance
- Inform Obstetric Unit
- Prepare for emergency transfer

Time/Comments

## RELIEVE PRESSURE ON THE CORD

- Manually elevate presenting part
- Fill the bladder with 500 mls NaCl
- Position woman in knees chest or exaggerated Sim's position
- If cord still inside vagina, apply a **dry** pad

Time/Comments

**If time prior to transfer (or on route)**
**Secure IV access/take bloods**

Time/Comments

Document all actions on proforma and complete DATIX Incident form

CYMRU / WALES PROMPT

Name:

DOB:

Patient ID:

# CORD PROLAPSE Documentation

ANNUAL UPDATE 2022 PROMPT PRactical Obstetric Multi-Professional Training

Person completing form

Name / Signature / Designation

## START

## Diagnose

| | | | | |
|---|---|---|---|---|
| **Place:** (please circle) | **Home** | **Birth centre** | **Obstetric unit** | **Ward** **Other**..... |
| **Date and Time:** | dd/mm/yyyy | hh:mm | | |
| **VE findings at diagnosis of Cord Prolapse:** | | | | |

## Escalate

| **Home/Birth Centre** | | |
|---|---|---|
| **Ambulance called?** (please circle) **Yes / No** | **Time called** hh:mm | **Time arrived** hh:mm |
| **Obstetric unit contacted?** (please circle) **Yes / No** | **Time called** hh:mm | **Arrival time at hospital** hh:mm |

| **Obstetric unit** | | | |
|---|---|---|---|
| **Call for help** | **Time** hh:mm | ✓ | **Time** |
| **Senior Midwife/Coordinator informed** and document time of arrival | | | hh:mm |
| **Senior Obstetrician informed (ST3+)** and document time of arrival | | | hh:mm |
| **Anaesthetist informed** and document time of arrival (and inform theatre team) | | | hh:mm |
| **Neonatologist informed** and document time of arrival | | | hh:mm |
| **Secure IV access/take bloods** | | | hh:mm |
| **Continuously monitor fetal heart rate – commence CTG** | | | hh:mm |

| | **Name** | **Designation/Role** | **Time of arrival** |
|---|---|---|---|
| **Additional team present:** | | | hh:mm |
| | | | hh:mm |
| | | | hh:mm |
| | | | hh:mm |

## Management of cord prolapse

| **Procedure** | **Time** |
|---|---|
| **If cord protruding from vagina, use dry pad to help keep cord inside vaginal opening whilst transferring to obstetric unit/theatre** | |
| Elevate the presenting part manually (please circle) **Yes / No** | hh:mm |
| Fill bladder (if appropriate and possible) (please circle) **Yes / No** | hh:mm |
| Maternal position: Left side with pillows under hip/ Knee-chest/ Trolley/ Bed (please circle) | hh:mm |
| Consider tocolysis with subcutaneous terbutaline 0.25mg (or other) (Please circle) **Yes / No** | hh:mm |
| Decision to birth interval .....minutes | |

TURN OVER FOR ONGOING MANAGEMENT

Name:

DOB:

Patient ID:

# CORD PROLAPSE Documentation (p.2)

ANNUAL UPDATE 2022 PROMPT PRactical Obstetric Multi-Professional Training

## Plan for Birth

| | | | |
|---|---|---|---|
| **Emergency transfer to hospital labour ward (if applicable)** | **Time** hh:mm | ✓ | **Time** |
| **Assess and assist birth by most appropriate means** (do not let other measures delay birth) | | | |
| **Mode of birth**: Spontaneous vaginal birth / Forceps / Ventouse / LSCS* (please circle)<br>*If LSCS – Grade: Category 1 / Category 2 (please circle) | | | hh:mm |
| **Urgency dependant on the fetal heart rate and gestational age**<br>(consider category 2 caesarean birth if FHR normal) | | | |
| **Mode of anaesthesia** GA / Spinal / Epidural (please circle)<br>If caesarean birth necessary – consider regional anaesthesia if possible | | | hh:mm |
| **Consider optimal cord clamping if infant is uncompromised** | | | hh:mm<br>(Cord cut) |
| **Neonatologist to be present in case resuscitation of infant required** | | | hh:mm |

## Post Birth

| | | | |
|---|---|---|---|
| **Apgar Scores:** | **:1 min** | **:5 min** | **:10 min** |
| **Cord samples** | **pH:** | **Base Excess:** | **Baby's Weight:** |
| Venous | | | **Admission to NICU?** Y / N (please circle) |
| Arterial | | | **Clinical Incident Reporting completed?**<br>Y / N (please circle) |

**Were there known risk factors for cord prolapse prior to birth?** Y / N ? (please circle) If Yes – Please state:

**Mother/birth partner(s) debriefed (add details below)?** **Y / N** (please circle)
**If Yes –** dd/mm/yyyy & hh:mm

**Team debrief** **Y / N** (please circle)

## Notes

## *Checklist for Clinical Guidelines being Submitted for Approval*

| | |
|---|---|
| Title of Guideline: | Guideline for the Management of Cord Prolapse |
| Name(s) of Author: | Laura Rose |
| Chair of Group or Committee supporting submission: | Labour Ward Forum |
| Issue / Version No: | 5 |
| Next Review / Guideline Expiry: | July 2027 |
| Details of persons included in consultation process: | Labour Ward Forum / obstetric consultants, anaesthetic consultant and lead midwives |
| Brief outline giving reasons for document being submitted for ratification | Update of previous policy 2020-2023 |
| Name of Pharmacist<br>(mandatory if drugs involved): | n/a |
| Please list any policies/guidelines this document will supercede: | Guideline for the Management of Cord Prolapse 2020 |
| Keywords linked to document: | Cord, Prolapse, obstetric emergency, umbilical |
| File Name: Used to locate where file is stores on hard drive | ABM Group (Z:)\Maternity\policies and guidelines\Obs\2020 onwards |

* To be completed by Author and submitted with document for ratification to Clinical Governance Facilitator