Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

Umbilical Cord Prolapse Guideline

Guideline Number:	612	Supersedes:		Classification	Clinical
LOCSSIP Reference:		NATSSIP Standard:	List standard (NATSSIPS Standards)		

Version No:	Date of EqIA:	Approved by:	Date Approved:	Date made active:	Review Date:
1	In progress	Obstetric Group Audit & Research Group	12/02/2021	26/4/2021	12/02/2024

Brief Summary of Document:	To recognise and manage Umbilical Cord Prolapse in pregnancy.
Scope	All Maternity areas within Hywel Dda University Health Board. ‘The term “woman/women” in the context of this document is used as a biologically based term and is not intended to exclude trans and non-binary people who do not identify as women.’

To be read in conjunction with:	
Patient Information:	

Owning group	Obstetric Guideline and Audit Group.

Reviews and updates		
Version no:	Summary of Amendments:	Date Approved:
1	New guideline	
2	Revised	12/02/201

Glossary of terms

Term	Definition
CP	Cord Prolapse
PROMPT	Practical Obstetric Multi Professional Training
RCOG	Royal College of Obstetricians and Gynaecologists

Keywords	Cord Prolapse, Occult, Overt, Knee-Chest, face down position, Exaggerated Sim's Position.

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1. Aim of Guideline
The aim of this guideline is to provide guidance and to standardise the recognition, management and documentation of Cord Prolapse.

2. Objectives
The objective of this guideline is to reduce fetal mortality/morbidity by ensuring early recognition and correct management of Cord Prolapse utilising PROMPT guidance.

3. Scope
The scope - All Maternity areas within Hywel Dda University Health Board.

- All midwives and Obstetricians should be mindful to exclude CP when abnormal fetal heart rate is detected.
- Consider the administration of tocolytics if appropriate.
- All staff should be aware of optimal maternal positioning on diagnosis of CP
- All staff should be aware of how to fill maternal bladder to alleviate cord compression if deemed necessary.
- All staff need to recognise the risk factors for CP.
- All staff need to be aware to call for immediate and appropriate help.
- To communicate effectively with the woman, partner and the multi-professional team.
- To understand the importance of appropriate documentation.

4. Introduction
Cord Prolapse has been defined as the descent of the umbilical cord through the cervix, either alongside (occult) or past (overt) the presenting part, in the presence of ruptured membranes.

Cord presentation is the presence of the umbilical cord between the fetal presenting part and the maternal cervix, with or without intact membranes.

5. Incidence
The incidence of umbilical cord prolapse ranges from 0.1% to 0.6% of all births. In breech presentation the incidence is around 1%.

6. Risk factors for Cord Prolapse

Antenatal

- Breech Presentation
- Multiparity
- Fetal Congenital abnormalities
- Unstable Lie
- Oblique or transverse lie
- Polyhydramnios
- External cephalic version
- Low birth weight (less than 2500g)

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Intrapartum

- Amniotomy (especially with a high presenting part)
- Unengaged presenting part
- Internal podalic version
- Second twin
- Disimpaction of fetal head during rotational operative vaginal birth or other manipulation of the fetal head
- Fetal scalp electrode application
- Stabilising induction of labour
- Large balloon catheter induction of labour

7. Recognition

- CP should be excluded at every vaginal examination. Auscultate the fetal heart rate, if not having continuous electronic fetal monitoring, after each vaginal examination and after spontaneous or artificial rupture of membranes.
- CP should be suspected when there is an abnormal fetal heart rate pattern (eg prolonged deceleration) in the presence of ruptured membranes, particularly if such changes commence soon after membrane rupture.
- A speculum and/or digital vaginal examination should be performed when CP is suspected, regardless of gestation.
- Mismanagement of abnormal fetal heart rate patterns is one aspect identified in perinatal death associated with CP.

8. Management

Call for help (Experienced Obstetrician, Midwife coordinator, additional maternity team assistance, neonatal team, Anaesthetist, Theatre Team).
If outside of an Obstetric facility call 999 for immediate emergency response. Notify Labour Ward co-ordinator of imminent transfer.

Clearly state the Obstetric Emergency.

Follow Algorithm for the Management of Cord Prolapse (appendix 2).

9. Documentation

- Ensure clinical notes and CP Proforma (appendix 1) are fully completed.
- Ensure case is Datix reported under “maternity trigger”.
- Debrief woman and birth partners
- Ensure immediate paediatric review of newborn and ensure findings are clearly documented in baby notes
- Ensure paired cord blood gases are taken and documented accordingly
- Ensure women are offered RCOG patient information leaflet-Umbilical cord prolapse in late pregnancy.

10. Auditable Standards

1. Minimise cord compression by placing mother in exaggerated Sim’s or knee chest position or filling bladder with 500-700 mls of sodium chloride through urinary catheter if there is a delay in delivery
2. Immediately commence continuous electronic fetal monitoring
3. If in labour, give Terbutaline 250 mcg by sc injection

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4. Paediatrician to be present at delivery
5. Paired cord gasses to be taken at delivery & recorded in the maternal health record

11. References

Winter,C. Crofts,J. Draycott,T (2017), PROMPT, Practical Obstetric Multi-Professional Training, Cambridge:Cambridge University Press.

RCOG. Green-top Guideline No. 50. (2012), Cord Prolapse.

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12. Appendix 1.(available from emergency folders in all areas)

Addressograph
or name and unit no

CORD PROLAPSE PROFORMA

Please tick the relevant boxes

Diagnosed: **Home** ☐ **Birth Centre** ☐ **CDS** ☐ **Ward** ☐

Time of diagnosis:.........................

Cervical dilatation at diagnosis: .... cm

If at Home / Birth Centre

Ambulance called? **Yes** ☐ **No** ☐ **Time called:** .... **Arrived:** ....

CDS contacted? **Yes** ☐ **No**☐ **Time called:** .... **Arrival time at Hospital:** ....

If on CDS/Ward

Senior Midwife called **Yes** ☐ **No** ☐ **Time**............ **Arrived**................

Senior Obstetrician called **Yes** ☐ **No** ☐ **Time**........... **Arrived**................

Grade of Obstetrician: ....

Neonatologist called **Yes** ☐ **No** ☐ **Time**........... **Arrived**................

Procedure used in managing cord prolapse		
Elevating the presenting part manually	**Yes** ☐	**No** ☐
Filling the bladder	**Yes** ☐	**No** ☐
Exaggerated Sims (left lateral) / Knee-Chest position / Head Tilt / Trolley / bed **(Please circle)**		
Tocolysis with sc Terbutaline 0.25mg or other	**Yes** ☐	**No** ☐
Decision to birth interval: ....minutes		

Mode of birth		**Mode of Anaesthesia**	
Spontaneous vaginal	☐	GA	☐
Forceps	☐	Spinal	☐
Ventouse	☐	Epidural	☐
LSCS	☐		

Apgar Score	**Baby's weight:**	
:1 min	**Cord PH**	**Base Excess:**
:5 min	**Venous:**	
:10 min	**Arterial:**	
Admission to NICU? **Yes** ☐ **No** ☐		
AIMS form completed? **Yes** ☐		
Known Risk Factor? **YES** ☐ **NO** ☐ **If YES, please state:**		
Mother debriefed **Yes** ☐ No ☐		

Signature: .... **Print:** ....

Designation: .... Date: ....

MCP 29207

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13. Appendix 2 (available from emergency folders in all areas)

Algorithm for the management of umbilical cord prolapse

RECOGNISE PROLAPSED UMBILICAL CORD

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

CALL FOR HELP

- Emergency buzzer in hospital/ Dial 999 for ambulance outside hospital
- Relieve pressure on the cord*
- Prepare for immediate birth experienced obstetric & midwifery staff, maternity theatre team, neonatologist
- Secure IV access/take bloods
- Continuously monitor fetal heart rate (if in hospital)

***METHODS TO RELIEVE PRESSURE ON THE CORD**

- Manually elevate presenting part
- Position woman:
  - Exaggerated Sims position – move women into left-lateral position with head down and pillow placed under left hip OR
  - knee–chest position
- Consider bladder filling if delay is anticipated and apply a *dry pad* to try to keep cord inside vagina
- Consider tocolysis with subcutaneous terbutaline 0.25 mg

PLAN FOR BIRTH

- Emergency transfer to hospital labour ward
- Assess and assist birth by quickest means (do not let other measures delay birth)
- Urgency dependent on fetal heart rate and gestational age (consider category 2 caesarean section if FHR normal)
- If caesarean section necessary – consider regional anaesthesia if possible
- Consider delaying cord clamping if infant is uncompromised
- Neonatologist to be present in case resuscitation of infant required

POST-BIRTH

- Paired umbilical cord gases
- Documentation (pro forma) and Clinical Risk Incident Report
- Debrief mother and relatives

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