

Guideline for the Management of Cord Prolapse

Specialty: Maternity
Date Approved: April 2020

Approved by: Labour Ward Forum

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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 membranes¹.

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

- Artificial rupture of membranes/stabilizing induction
- Vaginal manipulation of the fetus in the presence of ruptured membranes like Internal podalic version

Patients with transverse/oblique/unstable lie should be offered admission after 37+0 weeks gestation.

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

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 to exclude cord prolapse.

Ultrasound may be required to confirm ongoing fetal heart activity.

Management

- Call for help emergency buzzer, dial 2222 stating Obstetric emergency and the location
- 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.
- Place patient into head down tilt or knees to chest position ideally in left lateral position.
- Consider filling the bladder (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
- 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 ie. 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.
- A practitioner competent in neonatal resuscitation should be present at delivery.
- Paired cord blood samples should be taken.
- · Post natal debriefing should be offered to patient
- Complete a trigger incident from

References

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



Algorithm for Management of 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
 - o 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



Cord Prolapse Scenario: Clinical Checklist

		Time	V _
Recognise	Recognise abnormal fetal heart rate (may not always be abnormal)		
	Vaginal assessment		
	Diagnose cord prolapse		
Call for help	Emergency bell/call for ambulance/second midwife		
	Call for experienced help (including neonatologist) (if hospital setting)		
Relieve pressure	Woman in exaggerated Sims'/knee–chest position		
on cord	Manually elevate presenting part		
	Consider bladder filling		
	Consider tocolysis (if hospital)		
Plan for birth	Emergency transfer to theatre/hospital		
	Plan for appropriate method of birth (if hospital setting): Monitor fetal heart rate IV access and take bloods Category 1 caesarean section Operative vaginal birth		
Documentation	Consent		
	Timings of events/pro forma		
	Medication administered (if hospital)		
	Persons present		



Addressograph	
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CORD PROLAPSE PROFORMA or name and unit no Please tick the relevant boxes Diagnosed: Home Birth Centre CDS Ward Time of diagnosis:....

Cervical dilatation at diagnosis: cm								
If at Home / Birth Cent	re							
Ambulance called?	Yes 🗆	No 🗆	☐ Time called: Arrived:					
CDS contacted?	Yes 🗆	No□	Time called:			Arrival time at Hospital:		spital:
If on CD5/Ward	If on CDS/Ward							
Senior Midwife called		Yes		No		Time	Arri	ived
Senior Obstetrician call	ed	Yes		No		Time	Arri	ived
Grade of Obstetrician: .								
Neonatologist called		Yes	_ r	No		Time	Arri	ived
Procedure used in man								
Elevating the presenting part manually Yes \(\square\) No			No 🗆					
Filling the bladder				Yes		No 🗆		
Exaggerated Sims (left I	ateral) /	/ Knee-C	hest posit	ion /	Head Tilt	/Trolley / bed	(P	lease circle)
Tocolysis with sc Terbu	Tocolysis with sc Terbutaline 0.25mg or other Yes No							
Decision to birth interv	al:		mi	nutes	5			
Mode of birth				Mo	ode of An	aesthesia		
Spontaneous vaginal				GA				
Forceps				Spi	inal 🗆	1		
Ventouse	Ventouse							
LSCS								
Apgar Score	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:								

:5 min		Venous:	
:10 min		Arterial:	
Admission to NICU? Yes	□ No □		
AIMS form completed? Yes			
Known Risk Factor? YES	NO 🗆 If YES, pleas	se state:	
Mother debriefed Yes	□ No □		

Signature:	Print:
Designation:	Date:

Maternity Services

Checklist for Clinical Guidelines being Submitted for Approval

Title of Guideline:	Guideline for the Management of Cord Prolapse
Name(s) of Author:	Labour Ward Forum
Chair of Group or Committee supporting submission:	Labour Ward Forum
Issue / Version No:	4
Next Review / Guideline Expiry:	March 2023
Details of persons included in consultation process:	Labour Ward Forum / all obstetric consultants and lead midwives
Brief outline giving reasons for document being submitted for ratification	Update for previous policy (ratified March 2017)
Name of Pharmacist	n/a
(mandatory if drugs involved):	
Please list any policies/guidelines this document will supercede:	Guideline for the Management of Cord Prolapse 2017
Keywords linked to document:	Cord, Prolapse, obstetric emergency, umbilical
Date approved by Directorate Quality & Safety Group:	April 2020
File Name: Used to locate where file is stores on hard drive	

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