

Cord Prolapse

Version 6

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Care Group : Women and Children's
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Comments : References to SaTH Guidelines in the text pertain to the latest version of the Guideline on the intranet. Printed copies may not be the most up to date version.

Version	Implementation Date	History	Ratified By	Review Date
1	September 2004	New in this format	Labour Ward Forum Maternity Governance	July 2005
2	December 2006	Updated Inline with CNST requirements	Labour ward forum Maternity Governance	December 2008
3	April 2010	Updated Inline with CNST requirements	MGG Maternity Governance	April 2013
4	5 th May 2011	Minor change to monitoring	MGG	May 2014
4.1	12 th October, 2014	Extension to full review reflects current practice. Full review update once TNA reviewed	Extraordinary Approval	March 2015
4.2	24 th August 2015	Extension for 6 months. Guideline reflects current practice and training	Extraordinary Approval MGG	February 2016
5	4 th October 2016	Full Review	MGG & Maternity Governance	Oct 2019
5.1	31 st October 2019	Pending full version review extension to full review date	Extraordinary approval	October 2020
6	24 th March 2023	Full Review	Maternity Governance	March 2026

1.0 Introduction

The incidence of cord prolapse ranges from 0.1% to 0.6%. In breech presentation and multiple pregnancies, the incidence is slightly greater than 1%. It carries a perinatal mortality rate of 91/1000

It is important to identify the difference between cord prolapse and cord presentation (refer to definition) in order for appropriate management to be followed.

2.0 Aim

To provide guidance on preventing, diagnosing, and managing a cord prolapse.

3.0 Objectives

3.1 To provide a care pathway for women with umbilical cord prolapse

3.2 To provide guidance on prompt recognition and management of umbilical cord prolapse in the hospital and community settings.

4.0 Definitions

4.1 Cord prolapse

The descent of the umbilical cord through the cervix, beyond (overt) or alongside (occult) the presenting part, as a result of spontaneous rupture of membranes or following artificial rupture of membranes (ARM).

4.2 Cord presentation

The presence of the umbilical cord between the fetal presenting part and the cervix, with or without membrane rupture.

4.3 Unstable lie

When the longitudinal axis of the fetus (lie) is changing repeatedly after 37+0 weeks

5.0 Process

5.1 Risk factors:

These factors predispose to cord prolapse:

General	Procedure Related
Multiparity Low birth weight (less than 2.5 kgs) Preterm labour Fetal congenital anomalies Breech presentation Transverse, oblique and unstable lies Second twin Polyhydramnios Non engaged fetal presenting part Low lying placenta	ARM with high presenting part Vaginal manipulation of the fetus with ruptured membranes External cephalic version (ECV) (during procedure) Internal podalic version Balloon catheter induction of labour Stabilising induction

5.2 Prevention

A woman with any of the above risk factors will require intrapartum care on the Consultant unit following the high-risk intrapartum care pathway.

In women with PPROM and non-cephalic presentations admission to hospital should be advised

Any patient with a transverse, oblique or unstable lie after 37+0 weeks -discuss inpatient management. If the service user chooses outpatient management, ensure they are informed to attend immediately if PROM / signs of labour and educated re: knee -chest position.

In addition, these women will be advised to contact maternity triage as soon as there are signs of labour or suspicion of membrane rupture. Avoid artificial rupture of membranes with high presenting part – if required perform with theatres available

5.3 Figure 1: Management of cord prolapse- DOCUMENT TIMES AT EACH STEP

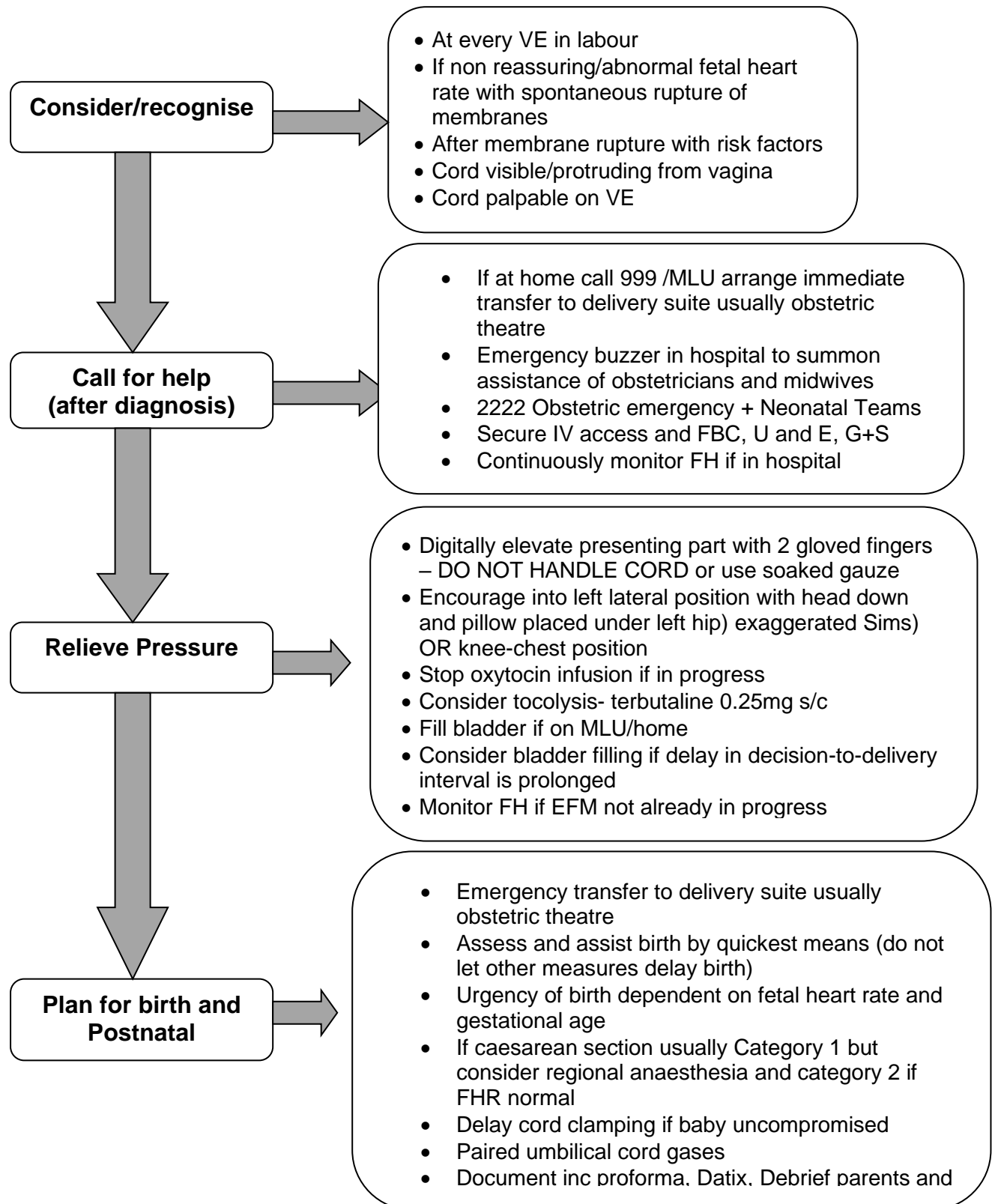


Figure 1- adapted from RCOG 2014 and PROMPT 2018

It is recognised that prompt vaginal examination is the most important aspect of diagnosis.

Immediate action will be taken as per figure 1 above. Further details of actions are outlined below

Bladder filling – for use at home / MLU / if delay to delivery interval

The aim is to fill the bladder in order to elevate the presenting part thereby relieving compression on the umbilical cord.

Procedure

- Insert Foley catheter into the urinary bladder
- Empty the bladder and Secure catheter using 10mls water for injection.
- Connect IVI giving set to drainage port on catheter and allow bladder to fill using approx. 500 mls normal saline and then spigot the catheter tube to prevent backflow.
- Transfer with fluid attached as this reminds staff to empty bladder or delivery

It is essential that the bladder is emptied again prior to any attempt at delivery either vaginally or by caesarean section.

- At each of the above steps the time will be noted and documented accordingly in the maternity records/birth notes

5.3.1 Community management

If a woman calls the maternity department, she will be advised over the telephone to assume the knee- chest face-down position while waiting for an emergency ambulance.

5.3.2 Midwife led unit or Home birth management

If cord prolapse occurs the midwife will follow the management set out in section 5.3.and in addition note the following-

- Bladder filling will be undertaken in preparation for transfer to the delivery suite
- During the emergency transfer the knee chest position is potentially unsafe and the left lateral with a pillow under the left hip is recommended (exaggerated Sims)
- Transfer to delivery suite will be undertaken as per transfer of a women in the AN, intrapartum or PN period guideline.

5.4 Expedite delivery /management

Expedite delivery; mode of delivery is dependent upon the following circumstances:

- Fetal heart rate
- Cervical dilatation.
- Presentation and descent of fetal presenting part.
- Assessment must be done in theatre. It is necessary to obtain verbal consent for any invasive procedure which may include episiotomy, ventouse or forceps delivery or caesarean section.

First stage of labour -Category 1 caesarean section is recommended

Second stage of labour-

Multigravid patient

- If the presenting part is low cavity, attempt to expedite delivery by using maternal effort. A multiparous woman may be able to deliver vaginally (in the time it takes to perform an instrumental delivery). This will only be attempted if delivery is assessed to be imminent and safe to proceed.

Primigravid patient

- If delivery is not considered imminent, instrumental delivery may be considered. This must only be attempted if the obstetric assessment and the fetal condition are determined as safe to proceed.
- If not possible, proceed to a **category 1 caesarean section**, checking FHR or cord pulsation immediately prior to anaesthetic.

Breech extraction

This can be performed by an obstetrician under some circumstances, such as delivery of a second twin.

Preterm birth at threshold of viability (22+0-24+6 weeks)

Expectant management should be discussed, and parents should be counselled re: both continuation and termination of pregnancy following cord prolapse in these circumstances.

5.5 Fetal heart not present

Do not proceed to caesarean section. The consultant obstetrician will be contacted regarding the subsequent management.

5.6 Documentation

- Clear and accurate documentation is essential, including name and designated grade of personnel present.
- Timing and sequence of events and actions taken will be documented within the birth notes/MIS. Within MIS, cord prolapse will be selected as a complication at birth in the delivery workflow.

6.0 Training

Staff will attend at least 2 yearly updating on cord prolapse as outlined in the Maternity Training Needs Analysis and Training Prospectus.

7.0 Monitoring/audit

Compliance with this guideline / SOP will be audited as part of the Shrewsbury and Telford Hospital NHS Trust's five-year rolling programme of NICE and local guideline audits, unless circumstances require an earlier or more frequent audit. The audit will be carried out using the auditable standards and the results will be reported and acted on in accordance with the Trust Clinical Audit Policy (CG25).

8.0 References

Caspi, E, Lowton Y, Schreyer P (1983) Prolapse of the cord; reduction of perinatal mortality by bladder instillation and caesarean section. *Isr J Med Sci.* 19, 541-5.

Katz, Z. Shoham, Z Lancet, M. Blickstein, L. Mogilner E. M. Zalel, Y. (1994) Management of Labour with Umbilical cord Prolapse: 5 year study. *Obstet Gynaecol.* 94; 278-81.

NMC (2009) Record keeping: guidance for nurses and Midwives, NMC

Practical Obstetric Multi-Professional Training (PROMPT)(2018) course manual second edition. Edited by Winter, C. Crofts, C. Laxton, C. Barnfield, S. Draycott, T. Cambridge university press.

RCOG (2014) Umbilical Cord Prolapse Guideline . Green- top[Guideline No. 50 . Royal College of Obstetricians and Gynaecologists.