

UMBILICAL CORD PROLAPSE

CLINICAL GUIDELINE MSCA.MBC.2.1

Definition

Cord prolapse is the descent of the umbilical cord through the cervix alongside (occult), or past (overt) the presenting fetal part after rupture of the membranes.

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

Risk factors

Fetomaternal	Obstetric Interventions
Fetal malpresentation	Artificial rupture of membranes
Prematurity	Amnioinfusion, amnioreduction
Multiple gestation	External cephalic version
Multiparity	Application of forceps/vacuum
Rupture of membranes	
Polyhydramnios	
Small fetus	
Low-lying placenta	

Detection

- Perform fetal heart rate monitoring directly after each vaginal examination when in active labour, after artificial rupture of membranes or after spontaneous rupture of membranes as a screening tool for possible cord prolapse
- Suspect cord prolapse when abnormal CTG pattern observed, e.g., severe, prolonged fetal bradycardia, or moderate to severe variable decelerations after a previously normal tracing
- Do speculum examination after spontaneous rupture of the membranes or when prolapsed cord suspected
- Do not rupture membranes when high presenting part or cord presentation in labour

Cord prolapse diagnosed

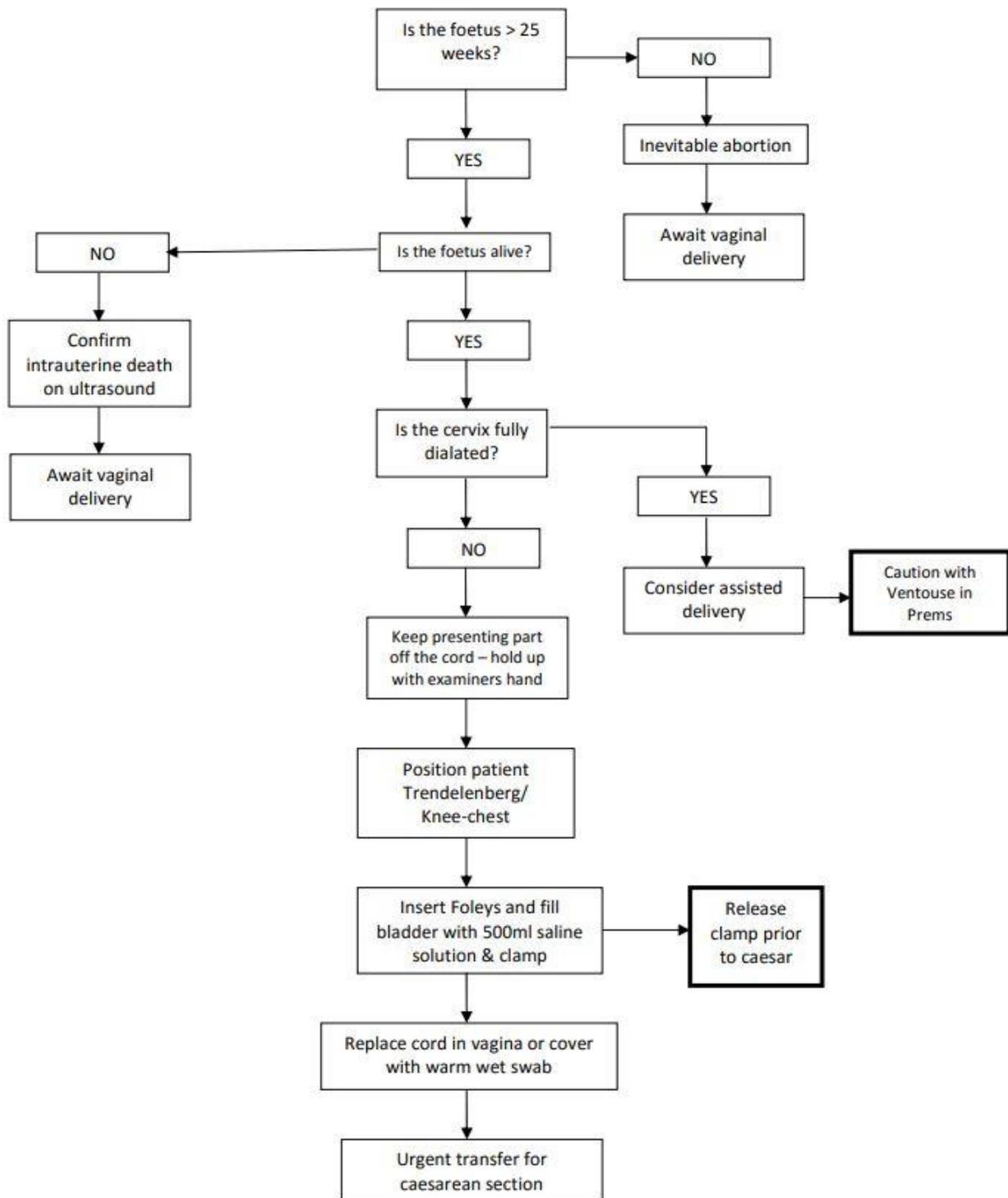
- Call for help immediately
- Confirm that the fetus is viable, alive and not severely abnormal (from previous records)
- If confirmed: Order caesarean section immediately (Anaesthetist, theatre team and Paediatrician) unless vaginal delivery is imminent (either spontaneously or with intervention)
- If delivery is not imminent: Keep presenting part up to avoid compression of the cord either manually using your hand (avoiding any pressure on the cord in the vagina) or by filling the bladder with 500ml water or saline and clamping the catheter.
- Try to prevent vasoconstriction by not over handling the cord and if it is protruding from the introitus, replace it gently into the vagina. Do not attempt to reinsert into cervix.
- Turn the patient in the knee chest position or put her in Trendelenburg position if feasible.
- Tocolysis with IVI Salbutamol if not contraindicated. Dilute 500µg Salbutamol in 100ml 0.9% saline. Give 2ml (10µg) IVI over 2 minutes
- Keep hand in vagina to hold fetal presenting part up or keep catheter clamped until baby delivered in theatre by the obstetrician.

NB! Check for fetal pulse before start of caesarean section. If there is no pulsation felt in the cord, check with ultrasound and if fetal demise is confirmed – counsel the patient on vaginal route of delivery.

Definitions

Term, Acronym or abbreviation	Definition
Tocolysis	Suppression of uterine contractions for the goal of delaying delivery
SROM	Spontaneous Rupture of Membranes
PTL	Preterm Labour
EFW	Estimated Fetal Weight
CTG	Cardiotocograph
IUFD	Intrauterine Fetal death

Management algorithm



Authorship

These guidelines were drafted by a clinical team from Mediclinic and were reviewed by a panel of experts from SASOG and the BetterObs clinical team in 2019 and revised by the scientific committee of BetterObs in 2023. All attempts were made to ensure that the guidance provided is clinically safe, locally relevant and in line with current global and South African best practise. Succinctness was considered more important than comprehensiveness.

All guidelines must be used in conjunction with clinical evaluation and judgement; care must be individualised when appropriate. The writing team, reviewers and SASOG do not accept accountability for any untoward clinical, financial or other outcome related to the use of these documents. Comments are welcome and will be used at the time of next review.

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History and version control

Author	Version	Details of update	Effective date
Cape Gate Obstetrician Working Group	1	Initial Release	2017 01 01
Expert External Obstetrician	1.1	Validated	2017 01 01
A. Hall	1.2	Rebranded to Mediclinic Clinical Guideline Edited and all drug names changed to active ingredients	2019 12 01
SASOG scientific committee Dr C Groenewald	2.1	Small fetus and Low-lying placenta added to list of risk factors Steps to take when cord prolapse diagnosed was changed. Intrauterine resuscitation was removed Management Algorithm is new - more practical.	2023 01 12

Approved by

Department/ Area/ Group/ Forum	Representative name	Signature	Designation	Date
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