

Document Control

Title Telemetry Management of High Risk Women in Labour and Birth using Water/Birthing Pool and Telemetry Standard Operating Procedure			
Author		Author's job title Specialty Doctor O&G Midwife	
Directorate Women & Children		Department Maternity	Team/Specialty
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Main Contact Specialty Doctor O&G North Devon District Hospital Raleigh Park Barnstaple, EX31 4JB		Tel: Direct Dial – 01271 322577 Tel: Internal – Email:	
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CONTENTS

Document Control.....	1
1. Background.....	Error! Bookmark not defined.
2. Purpose.....	Error! Bookmark not defined.
3. Scope	Error! Bookmark not defined.
4. Location	Error! Bookmark not defined.
5. Equipment	Error! Bookmark not defined.
6. Procedure	Error! Bookmark not defined.
7. References.....	Error! Bookmark not defined.
8. Associated Documentation	Error! Bookmark not defined.

1. Introduction

1.1. Offer telemetry to any woman who needs continuous cardiotocography during labour (NICE 2017, 1.10.9)

Offer the woman the opportunity to labour in water for pain relief (NICE 2017, 1.8.4)

There is evidence that immersion in water offers women a safe and effective form of pain relief in labour. To those women who require or opt for continuous electronic monitoring in labour, the use of telemetry provides greater choice and control. The use of telemetry promotes increased mobility and upright positions in labour as well as facilitating the use of water in labour.

2. Purpose

This Standard Operating Procedure (SOP) has been written to facilitate continuous fetal monitoring of high risk women in labour and birth who wish to use the birthing pool.

Telemetry is a wireless fetal monitoring device which facilitates continuous cardiotocograph (CTG) monitoring in the first and second stage of labour on a consultant led delivery suite.

Prior to the woman being offered the use of the birthing pool on the delivery suite, consideration should be given to the plan of care and requirements of the woman and baby by reviewing the full antenatal history.

3. Scope

This Standard Operating Procedure relates to the following staff groups who may be involved in the assessment and delivery of intrapartum care:

- Registered Midwives
- Obstetric Staff

Staff undertaking this procedure must be able to demonstrate continued competence in using telemetry in the birthing pool as per the organisation's policy on assessing and maintaining competence.

4. Location

- 4.1. This Standard Operating Procedure can be implemented in all clinical areas where competent staff are available to undertake this role.

5. Equipment

- Telemetry for continuous fetal monitoring – for full instructions please refer to Avalon Fetal Monitor manual available on Labour Ward

Inclusion and Exclusion Criteria
Inclusion criteria for High Risk Women requiring continuous CTG who wish to use the Birthing Pool for Labour and Birth:

- Woman's informed choice
- Pregnancy equal to or over 37 weeks' gestation
- Established labour (regular contractions and dilating cervix)
- Cephalic presentation
- Singleton
- Maternal and fetal observations normal throughout labour
- At least 3-4 hours since administration of opioids
- No known or suspected active infection

NOTE: Indications for Continuous Electronic Fetal Monitoring are as per Fetal Wellbeing and Monitoring Guideline (2018)

Criteria for women with higher risk pregnancies using the pool on labour ward:

The following lists are not exhaustive and there should be multi-disciplinary

discussion and a documented agreement of the plan. It is also dependent on an adequate CTG trace with telemetry when indicate

5.1. Medical reasons

Pool may be considered	Pool not recommended	Comments
Hypertension – depending on extent and pathology		More intensive monitoring of BP needed - discuss with consultant on admission whether pool appropriate or not
	epilepsy	

5.2. Obstetric Reasons

Pool may be considered	Pool not recommended	comments
GDM diet-controlled	GDM requiring insulin	
Induction for post dates		Providing post prostin/propess/balloon CTG is normal
GBS		After 1 st dose of antibiotics
VBAC		With telemetry
Raised BMI of 35-50 when individual assessment shows auscultation possible		If the woman requires telemetry, obtaining an adequate trace is essential
Previous PPH		Cannula to be inserted prior to going in pool and active 3rd stage conducted out of the pool
Previous MROP		
Fibroids		Cannula to be inserted prior to going in pool and active 3rd stage conducted out of the pool
Previous shoulder dystocia		For labour ONLY
	Low Hb < 100g/dl	
	Syntocinon infusion	
Prolonged SROM		With telemetry
Fetal size estimated >97 th centile		For labour ONLY
	Suspected IUGR	SGA babies with reassuring scans and dopplers may be considered

Exclusion criteria for High Risk Women who require Continuous CTG in labour and Birth who **SHOULD NOT USE** the Birthing Pool:

This list is not exhaustive. If in doubt seek obstetric management plan for other high risk women requiring continuous CTG and requesting the use of the Birthing Pool

- Major medical disease requiring intensive maternal monitoring e.g. cardiac disease, diabetes, or posing a risk of seizure or collapse
- Pregnancy complications posing risk of seizure or collapse e.g. current APH, PET
- Significantly compromised mobility
- Maternal pyrexia (37.5 on two occasions or 38 once) and/or evidence of active infection
- Active herpes
- Gestation less than 37 weeks

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- Less than 3 hours since administration of opiates such as diamorphine or pethidine, or if the woman is still drowsy
 - Placenta praevia
 - Breech Presentation
 - Unstable lie
 - Significant polyhydramnios
 - Non engaged head
 - Multiple pregnancy

5.3. Procedure

- Prior to the woman entering the pool ensure the woman and birth partner have been given relevant information to facilitate informed choice, and document this discussion in the maternal labour record (yellow notes)
- Explain to the woman she may choose to leave the pool at any time and will be requested to leave the pool should any complication arise
- Document the time of entry and exit in the yellow notes
- In an emergency situation where the woman is unable to leave the pool there is dedicated lifting equipment available to evacuate the pool quickly. This equipment is to be checked prior to using the pool and correct sized sling to be chosen in case the hoist is required. All checks to be documented in the yellow notes.
- All maternal and fetal observations to be recorded as indicated in Clinical Guideline <http://ndht.ndevon.swest.nhs.uk/intrapartum-care-care-of-healthy-women-and-their-babies-during-childbirth-including-fetal-monitoring-in-labour/> except for maternal temperature, which should be recorded hourly as maternal pyrexia increases the risk of fetal tachycardia
- Pool temperature to be checked and documented regularly. This should be comfortable for the woman, but not to exceed 37°C and to be kept between 36.5°C and 37°C when baby's birth is imminent.
- Management of the third stage is mother's choice, although she should be aware that an actively managed third stage reduces the risk of haemorrhage. Refer to appropriate individual Clinical Guideline re high risk and management of the third stage.
<https://www.nice.org.uk/guidance/cg190/chapter/Recommendations#third-stage-of-labour>
- If active management is chosen, the third stage should be undertaken out of the pool
- If the woman's condition permits, perineal suturing should be delayed for up to one hour to allow the tissue to revitalise after water immersion.

6. References

Garland, Dianne (2017) *Revisiting waterbirth: an attitude to care* (2nd edition) London: Palgrave

National Institute for Health and Care Excellence (NICE) (2017) *Intrapartum care for healthy women and babies* (CG190) <https://www.nice.org.uk/guidance/cg190>

7. Associated Documentation

Fetal Wellbeing and Monitoring Guideline (2018)

<http://ndht.ndevon.swest.nhs.uk/auscultation-and-electronic-fetal-monitoring-guidelines/>

Delivery after previous caesarean section guideline (2018)

<http://ndht.ndevon.swest.nhs.uk/birth-after-previous-caesarean-delivery-guidelines/>

Intrapartum care: care of healthy women and their babies during childbirth Including Fetal Monitoring in Labour (2018)

<http://ndht.ndevon.swest.nhs.uk/intrapartum-care-care-of-healthy-women-and-their-babies-during-childbirth-including-fetal-monitoring-in-labour/>

This website incorporates information about waterbirth as well as a full list of references:

<https://evidencebasedbirth.com/waterbirth/>