Clinical Guideline

WATER IMMERSION FOR LABOUR AND BIRTH

SETTING	Maternity Service, care in all settings
FOR STAFF	Midwives and obstetricians
PATIENTS	Pregnant women

GUIDANCE

Criteria for entry into the pool

- Women suitable for a pool labour and birth are a singleton pregnancy *beyond* 37 weeks gestation, cephalic presentation with no known or envisaged obstetric or medical problems.
- Women who have received opioids should not enter the pool for at least 2 hours or if they feel drowsy.
- In cases where a woman does not meet these criteria and she wishes to use the pool for labour, discussion should take place with a midwifery matron and / or the woman's obstetric consultant, ideally in the antenatal period. This should be documented in the women's hand held notes.
- Ruptured membranes are not a contraindication to water immersion as research has not shown there to be increased risk of infection.
- GBS infection in pregnancy is no longer a contraindication for use of the pool see Group B Streptococcus Guideline. However, women should be encouraged to keep the cannulated hand out of the water. IAP should also be given when the woman is out of the water; she should be informed about this in pregnancy and on admission to the unit. This is in case she should experience an adverse reaction to the medication.

- **If there is are any concerns around fetal or maternal wellbeing the women should be advised to exit the pool immediately**

- **Use of water in latent phase**
  The pool or a bath should be offered in the latent phase as an alternative to medication

Care during the first stage of labour

- There is little evidence regarding the optimal time for entry into the pool during labour (1)
- The woman should not be unattended while she is in the pool for any long periods of time, especially if her partner is not present
- Maintain a comfortable water temperature do not exceed 37.5 degree centigrade
- Women are able to self regulate their temperature according to changes in the water temperature (4)
- Record maternal and pool temperature, and maternal pulse hourly (6)
- If the maternal temperature rises above 37.5 degree centigrade (Tympanic), or if tachycardic (pulse > 100) the woman should be asked to get out of the pool, until temp and pulse normalise before re-entering the pool
- Record the maternal BP 4 hourly as usual during the 1st stage of labour
- Record the fetal heart every 15 minutes during the 1st stage of labour. If there are any signs of fetal compromise the woman is advised to leave the pool and continuous electronic fetal heart monitoring commenced. Transfer to a CDS from MLU and community settings. If there are any difficulties auscultating the FH the woman should be asked to exit the pool.

- Attempt to keep the water clear
- Encourage good fluid intake to prevent dehydration.
- The water in itself is used as pain relief in labour and should be offered as an alternative to opioids or regional anaesthesia. Additional analgesia such as Nitrous Oxide + Oxygen can be given.

Using telemetry for fetal monitoring

- If the fetus requires continuous electronic monitoring in labour and the mother wishes water immersion, perform an individual risk assessment before deciding whether water immersion is appropriate for the mother e.g VBAC and uncomplicated induction of labour
- If possible discuss with a midwifery matron and/or the woman's Obstetric Consultant or the on call obstetric team, ideally in antenatal period, but this can be done at any time if required
- The telemetry abdominal transducer can be used in water, but only up to a depth of 50cm. It may be difficult to monitor the fetal heart rate effectively at a deeper level
- Do not use the telemetry FSE transducer under water as it is not watertight
- A Fetal Scalp Electrode is not recommended

Care during the second stage of labour

- Maintain a comfortable water temperature. The temperature should be around 37 degree centigrade and not above 37.5 degree centigrade.
- Record the fetal heart rate at least every 5 minutes during the second stage of labour
- Care during the second stage of labour will be the same as that out of the pool.
- The woman's buttocks and perineum should be wholly under the water as the head is being born.
- The baby must be born completely under water with no air contact until the baby is brought gently to the surface of the water face down following birth of the body.
- Avoid any unnecessary traction on the umbilical cord as the baby is being brought to the surface.
- Non stressed babies are unlikely to commence breathing whilst underwater.
- Babies born into water have less stimulation to breathe e.g. cold air. It may be necessary to lift the baby out of the water for a few seconds to stimulate the first breath.
- The midwife should not top up the water to maintain the temperature during a home birth. This is the responsibility of the birth supporter and should be discussed at the home birth risk assessment visit.

Care during the 3rd stage of labour.

- There is no current evidence to imply that the third stage must be conducted outside of the birthing pool. However it is not possible to estimate blood loss in the pool so to manage the women safely is may be necessary to transfer her out of the pool.
- Risk of water embolism has not been validated in current research.
- If the woman chooses a managed third stage it is recommended that she leaves the pool prior to the delivery of the placenta.
- If there is evidence of haemorrhage syntometrine can be given (in the upper arm if necessary if the water level is still high), and the mother is then transferred out of the pool.
- Refer to the Labour Care guideline for more information on the 3rd stage.

Care of the mother and baby after delivery.

- Post delivery care as normal ensuring baby temperature is maintained if remaining in the water. Place a hat on the baby and keep the baby's body in the water. Dry and cover in warm towels when exiting the pool.

Emergency situations

- The two most likely scenarios are either the mother may faint / collapse in the pool or there may be a shoulder dystocia. It is vital that arrangements are clear to all staff and the woman how

these emergencies should be managed:

- Faint / collapse:
  - Call for help
  - Support the woman's face above water
  - Use floatation aids or net / hoist to remove the woman from the pool
  - Do not attempt to empty the pool as this will prevent the use of the hoist as the woman will be too low down in the pool
- Shoulder dystocia:
  - Call for help
  - Ask the woman to get out of the pool as quickly as possible and commence required manoeuvres
  - Be aware that the movement of exiting the pool may release the shoulders and precipitate delivery.

Infection control

- There is no evidence of any significant differences in the incidence of maternal infection
- The sieves and emergency nets are single patient items
- The hoist may have a resusable or single patient use slings. Please check before discarding after use.
- Clean the pool thermometer after use with Actichlor.
- When the pool is empty of water, clean with Actichlor.

Version 5.1

Reviewed and updated by
[redacted] and [redacted]

Consultation

[redacted]

Ratified by [redacted]
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RELATED DOCUMENTS
Labour Care http://nww.avon.nhs.uk/dms/download.aspx?did=1767
Fetal Monitoring in labour
http://nww.avon.nhs.uk/dms/download.aspx?did=1783
Immediate Care of the Newborn
http://nww.avon.nhs.uk/dms/download.aspx?did=1788

AUTHORISING BODY [redacted]

SAFETY
Staff should be aware of posture to avoid back strain
Care should be taken to avoid slips, trips and falls where there is water on the floor.

QUERIES
Contact the CDS co-ordinator on ext [redacted]