4 PAIN MANAGEMENT IN LABOUR

4.1 RELAXATION / COMFORT MEASURES

4.1.1 WATER THERAPY (INCLUDING UNPLANNED BIRTH IN WATER)

PURPOSE
To provide a safe and non-invasive method of relaxation and pain relief for women in labour.

BACKGROUND INFORMATION
Hydrotherapy has marked physiological effects on the cardiovascular system. It is suggested that water immersion during labour increases maternal satisfaction and sense of control. Water immersion may be associated with improved uterine perfusion, less painful contractions, a shorter labour with fewer interventions.

KEY POINTS
1. This guideline describes the additional care that is required, to that routinely provided, when healthy women choose to use water immersion during labour.
2. Staff must be trained in, and have practiced emergency drills in the correct procedure to assist the woman leave the water in an emergency situation.
3. If a woman is considering the use of immersion in water during labour, this should be discussed during pregnancy to enable the woman to make a fully informed decision.
4. Agreement to the use of water immersion must be obtained and documented after discussion with the woman, preferably during the antenatal period.
5. The midwife or medical practitioner must be confident and competent to facilitate the woman’s labour.
6. The midwife or support person should remain with the woman at all times to maintain safety during water immersion. Should the midwife leave the area she should ensure a support person remains present with the woman, and leave instructions how to summon assistance if required.
7. Women should not use water immersion within 4 hours after opioid analgesia.
8. The water temperature should not exceed the maternal body temperature as immersing a woman in water above her natural core temperature will result in fetal hyperthermia and associated cardiovascular and metabolic disturbances. The temperature should not exceed 37.5°C.
9. Maternal temperature and water temperature should be monitored hourly during water immersion.
10. Monitoring of the fetal heart shall be performed using an underwater Doppler.
11. Avoid the use of oils and additives to the water.
12. Staff should wear long gloves and protective clothing as appropriate. Skin breaks should be covered by occlusive dressings.
13. Positive Group B Streptococcus vaginal or rectal swabs during pregnancy is not a primary contra-indication for water immersion.
14. Women with ruptured membranes for more than 18-24 hours may be offered the option of water immersion during first stage labour provided they have commenced the recommended course of antibiotics.
15. Women in the Labour and Birth Suite at KEMH should be asked to leave the water when second stage appears imminent, or if second stage of labour commences.
16. Women considering using water immersion during the first stage of labour should be informed of the KEMH guidelines in the antenatal period.
17. Ensure emergency equipment is readily available close to the room.
18. Planned water births shall not be conducted in the Labour and Birth Suite at KEMH.

WOMEN SUITABLE TO USE WATER IMMERSION IN LABOUR

Women suitable to use water immersion during labour include:

- women with no obstetric, fetal or medical risk factors
- singleton pregnancy
- Cephalic presentation
- 37 weeks or more gestation
- not a carrier of or infected with HIV, Hepatitis B or C virus
- body mass index equal to or less than 35 pre pregnancy or at the booking visit

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<thead>
<tr>
<th>PROCEDURE</th>
<th>ADDITIONAL INFORMATION</th>
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<tbody>
<tr>
<td>1</td>
<td>Prior to water immersion</td>
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<tr>
<td>1.1</td>
<td>Inform the woman of the criteria of when water immersion is no longer recommended.</td>
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<td>1.2</td>
<td>Obtain verbal consent from the women.</td>
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<td>1.3</td>
<td>Ensure the bath is cleaned prior to and after use. Allow to air dry.</td>
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<td>1.4</td>
<td><strong>Filling the bath for water immersion</strong></td>
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<td></td>
<td>• Run taps on ‘full’ for several minutes before filling.</td>
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<td></td>
<td>• The water level should be at maternal breast level when sitting.</td>
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<td>1.5</td>
<td><strong>Water temperature in the bath</strong></td>
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<td></td>
<td>• Encourage the women to adjust the water temperature to her level of physical comfort.</td>
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</table>
• Check and record water temperature hourly. The temperature to reach a thermal comfort zone in water varies and depends on the woman’s subcutaneous layer of fat.

• If the woman feels too hot, or her temperature is raised, encourage her to leave the water until she has cooled down. Check the maternal temperature after 30 minutes, and if normal she may return to the water. The water temperature should be checked and cool water added if too warm.

**Note:** A woman with a maternal temperature above 37.6°C on two occasions should leave the water.

2 **Fetal monitoring**

Monitor the fetal heart rate using an underwater doptone.

3 **Maternal hydration / elimination**

- Encourage adequate fluids
  Prevents dehydration.⁴ ⁵

- Encourage the woman to leave the water to urinate at regular intervals.
  Urine output may indicate when a woman is becoming dehydrated. Encourage the woman to void 2 hourly.

4 **Monitoring maternal temperature**

Monitor maternal temperature hourly during water immersion.

Inform the medical team:

- if the woman’s temperature is raised and does not return to normal within 30 minutes after leaving the water.
- if there are any signs of maternal and/or fetal infection
- if there are signs of maternal dehydration.

Abnormal maternal temperature may indicate infection or dehydration.⁵

5 **Vaginal examination**

A vaginal examination is usually performed with the woman out of immersion.

Occupational safety and health issues should be considered for both the midwife and the woman. An accurate vaginal assessment may be difficult to perform if the woman remains in the bath.

6 **Safety issues**

- Arrange assistance to aid the woman in and out of the bath.
  Prevents falls or slipping.

- Ensure wet floors/areas are immediately dried.
  Prevents accidents or slipping for the woman or other personnel.

- Ensure equipment is available for staff attending the woman
  Pads to kneel on, cushions, low stool and birthing balls may be useful.
7 Documentation

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<tr>
<td>In addition to the usual labour record document:</td>
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<tr>
<td>• times of entering and leaving the water(^5)</td>
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<td>• reason for leaving the bath</td>
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<tr>
<td>• water and maternal temperatures</td>
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<td>• when the water temperature is adjusted for maternal comfort.(^7)</td>
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**UNPLANNED BIRTH IN WATER**

1. If the labour is progressing rapidly and the woman is unable to be removed from the bath, do not try to remove the woman from the bath or pull out the plug.

2. Two midwives should be present for the birth.

3. A ‘hands off’ approach supported with verbal guidance is advocated.

4. Once the head is born loosen / disentangle the cord in the usual manner if necessary. Do not clamp or cut the cord at this stage.

5. Assist the birth of the shoulders as required.

6. Gently bring the baby to the surface, head first, within 1-2 minutes of birth. Avoid undue tension on the umbilical cord.

7. Support the baby’s head above the water – at the level of the mother’s uterus where possible. Do not allow the baby’s face to go back under the water.

8. Clamp and cut the cord above the water line.

9. Ask the woman to leave the bath or stand up to deliver the placenta.

10. Support the woman to ensure she does not slip.

11. After the mother is out of the water
   - Give the oxytocic.
   - Collect cord blood.
   - Deliver the placenta and membranes.

12. Document the events accurately.
REFERENCES (STANDARDS)


2. Government of Western Australia Department of Health. Women’s and Newborn’s Health Network. Clinical Guidelines for women requesting immersion in water for pain management during labour and / or birth. 2013


National Standards – 1 Clinical Care is guided by current best practice
Legislation - Nil

Related Policies – B 5.8.1 Care of a Woman during the First Stage of Labour.
Other related documents – Clinical guidelines for women requesting immersion in water for pain management during labour and /or birth.
Exemplar of audit tool for the use of water during labour and/or birth at hospitals and health services in Western Australia.
Labour and Birth Using Water - Consumer brochure

RESPONSIBILITY

Policy Sponsor: Nursing & Midwifery Director OGCCU
Initial Endorsement: March 2007
Last Reviewed: June 2014
Last Amended: Review date June 2017