Title: WARM WATER IMMERSION FOR LABOR & BIRTH	Number: 175.179 Effective: 2/2000
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POLICY

To provide the laboring woman with a flexible, low risk alternative to delivering in a bed. To enhance the normal physiologic process of birth, viewing it as wellness, rather than illness centered. To provide a gentler transition to the world for the newborn.
Following recommended guidelines for correct procedure.

PROCEDURE

WATER TEMPERATURE

1. Water temperature for immersion during labor may very but should never exceed 101 degrees Fahrenheit. Temperatures higher than 101 degrees cause dehydration of the mother, overheating, and lead to fetal tachycardia.
2. Water temperature for immersion during birth should not vary more than 95-100 degrees Fahrenheit (due to newborn breathing mechanisms at the time of birth).

EQUIPMENT NEEDED

Portable or permanent pool
Waterproof doppler or waterproof leads on EFM
Thermometer (may be floating)
Drain pump if using portable pool
A length of hose sufficient to reach pool but not long enough to cause kinks
Faucet adapter for portable pool filling
Waterproof cover gown with attached gloves - required
Splash guard eye wear or safety goggles - required
Medium sized tropical fish net
Inflatable pillow
Extra towels, bath blankets
Delivery kit
Infant radiant warmer and newborn resuscitation equipment (as with all deliveries)
Patient: robe x 2 and pool shoes

PROCEDURE DURING LABOR

1. A laboring mother must never be left unattended in the bath or pool (reliable family members or staff must attend her).
2. The woman may enter the water at any point in labor, however, if cervical dilation is 0-4 cms, entering the water may decrease the frequency of uterine contractions. Ambulation is recommended until the dilation is 4-5 cms and the contraction pattern is well established.
3. The woman may adopt any desired position in the water.
4. Provide hydration for the mother with cold drinks (water, juice, sport drinks, any clear liquid).
5. Personal protective equipment (barriers meeting CDC universal precaution requirements) must be available and utilized by all personnel as needed.
6. Observe and document the following:
   a) Membranes
      i) Check status, when SROM occurs check FHT and check for cord prolapse.
      ii) Meconium staining can be evaluated by checking color and monitoring on EFM. If fetal well-being is established, mother may return to pool.
   b) Cervical dilation and effacement, fetal position. This can be assessed prior to entering pool. Vaginal exams may be done in the water or mother may be asked to leave pool or raise her buttocks, sit on the edge of the pool, or stand.
   c) Maternal hydration (dehydration is evidenced by maternal and fetal tachycardia, increased maternal temperature). If signs and symptoms of dehydration occur, force clear liquids. If dehydration persists, may start IV of Lactated Ringers at discretion of physician/CNM. Client may remain in the pool with IV site covered with plastic.
   d) Fetal heart tones per routine labor protocol (before, during, and after a contraction) via doptone, fetoscope, or intermittent auscultation.
   e) Progress of labor, including contraction pattern.
   f) Maternal vitals signs (hourly temperatures). It should be noted that during and following warm water immersion, it is normal to observe a slight increase in maternal temperature and elevation of the fetal baseline heart rate. If mother experiences dizziness, check BP, pulse, temperature, fluid intake, and cool her down as needed. Coach controlled breathing.
   g) Cleanliness of Water
      i) Water is changed, or the client is removed from the pool, if excessive feces or debris accumulates during labor that cannot be easily removed with a medium sized fish net.
      ii) Nothing needs to be added to the water to sanitize.
      iii) Aroma therapy drops can be added at the discretion of family or practitioners.
   h) Check water temperature with thermometer hourly and document.

SECOND STAGE IN WATER – BIRTH OF THE INFANT

1. Mother may adopt any position that feels safe and is comfortable for her – freedom of movement allows each woman to instinctively find her own appropriate birthing position.
2. If using a pool with whirlpool jets, they must be turned off during pushing stage to allow for better visualization of the perineum by the practitioner and to reduce the amount of noise the infant is exposed to.
3. Birth of the head is facilitated by gentle pushing by the mother. Shoulder length gloves are worn by the practitioner attending the birth. Perineal support and gentle pressure may still be used if indicated. The mother may control the birth of the head with her own hands.

4. Manipulation of the head is usually not necessary to facilitate delivery of the shoulders.
   a) Waiting until the next contraction is recommended before manipulation.
   b) Fetal heart tones should be assessed after every pushing effort.
   c) If restitution and delivery of the shoulders does not happen after two contractions, mother is advised to stand or get out of the pool to finish the delivery.
5. The presence of meconium, especially light meconium, does not rule out birth in the water.
   a) Note the color and consistency of the meconium and finish the birth in the water.
6. Once the complete body of the infant is birthed, the baby is lifted out of the water immediately. Infants are not left under the water for any reason.
   a) Care should be taken in lifting body out of the water, assessing length of umbilical cord.
   b) Apgar assessment should be done after baby is lifted onto mother's chest. (It has been noted water born babies do not breathe right away, but start slowly within the first minute.)
   c) Suctioning of the oropharynx and nares may be done while infant is on mother's chest.
   d) Infant can be kept warm either by submersion of everything but the head in the warm water, or warm blankets or towels may be placed over the body while still on mother's chest.
   e) Umbilical cord should not be cut right away, allowing cord to continue to pulsate.
7. Mother is to be encouraged to breastfeed immediately to assist in the contracting of the uterus and the expulsion of the placenta.
8. Waterbirth is noted on the delivery record.

THIRD STAGE – DELIVERY OF THE PLACENTA

The goal is to provide delivery of the placenta and perineal/vaginal inspection within 45 minutes. Placenta is delivered in or out of the water at the discretion of the CNM or physician.

Delivery of the placenta in the water:

1. A lightweight container should be used to facilitate floating the placenta if the cord has not been cut prior to placental delivery.
2. Parents are given the opportunity to cut the cord, per instruction of the practitioner.
3. Cord is cut after placenta has been expelled.
4. Estimated blood loss is assessed according to a change in the color of the water. The darker the water, the more blood loss is estimated.

Delivery of the placenta out of the water:

1. Umbilical cord has been clamped and cut.
2. Baby is dried, wrapped in dry blankets, and handed to father, parent, friend, or nurse.
3. Mother is assisted out of the tub, either into the bed, squatting beside the tub, or on birthing stool, or sitting on the side of the pool.
4. Mother is dried and wrapped in a warm bath blanket.
5. Placenta is delivered in the usual method.

EVALUATION OF THE NEWBORN AFTER WATER BIRTH

While mother is still in pool, with newborn on mother's chest:

1. Apgar assessment is made according to standard guidelines, with the understanding that babies born in water take up to 60 seconds to breathe after they are brought out of the water.
2. If fetal tachycardia (HR> 160) is present, the water temperature should be assessed, cooled if >101 F, or mother and baby should be assisted out of the pool by the five minute Apgar.
3. Baby may be suctioned or a DeLee trap may be used as indicated.
4. Keep baby's body warm by keeping body lowered into the warm water with head out or body covered with warm blankets or towels.
5. Standard protocol for newborn care is followed.
6. After cord is cut and baby is removed from the water:
   a) Standard baby warmer should be in tub room or as near as is practical.
   b) After physical assessments are made, baby is wrapped warmly and given to mother/significant other.

REFERENCE

Global Maternal/Child Association, January 1998

Formulated: February 2000

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