History gathering about the mother and pregnancies are very important.

History questions for expectant mother:
- Gestational age.
- Gravida, Para, TPAL status.
- How many babies are expected?
- Has the water broken? What was the condition of the fluid?
- Are there any prenatal risk factors?
- Has prenatal care been provided?

The physical assessment must involve visualization. The critical care team must observe for crowning, breech presentation, umbilical cord prolapse, or a mother who does not appear to be delivering immediately.

Crowning indicates that delivery is imminent. If birth is imminent, the team must help deliver and be prepared to resuscitate mother and baby. Drying and stimulating a healthy baby, then placing it skin to skin with mother will provide best outcomes in a normal birth. Delayed cutting of the umbilical cord (2 to 3 minutes) has shown decreased fetal anemia and increased oxygenation as the baby continues to receive blood from the placenta while its lungs acclimate to its external environment.

Breech presentation may progress without difficulty in a term baby as the buttocks are able to pass through the birth canal at the same state of dilation as the head. Preterm babies’ heads are larger than the buttocks and may become arrested in the birth canal, requiring episiotomy, cesarean section, or digital separation of the airway from the cervical opening.

NCME Up-2-Date
ABC’s of Field Delivery for a HEMS Team

Introduction

Field delivery of baby is a rare occurrence for most critical care providers, but a situation that we should be prepared to handle. Birth is a high stakes process that has potential pitfalls and complications for the mother and baby that is one of the most litigated calls in EMS. Most births will not need to happen in a hospital with cesarean section NICU capabilities, but the flight team should do everything it can to ensure that a delivery does not occur in the field, where resources are limited.
Umbilical cord prolapse requires cesarean section to prevent the baby from being deprived of oxygen long enough to cause neurological damage or death. If a prolapse is found on physical exam, the team must insert fingers into the vagina and lift the baby off of the cord in an attempt to return pulsations to the cord, thus perfusion to the baby. Once achieved, the team member holding the position will remain in that position until the baby is delivered by cesarean section. Nitroglycerin and tocolytics may help the mother get to the operating room prior to delivering.

The flight team must consider alternative options in regards to transport prior to encountering difficulties. Diverting to a cesarean section capable hospital while requesting a neonate capable HEMS transport is one option. Transporting the patient and team via ambulance toward such a facility is another if the team is concerned that delivery may happen during transport.

After delivery, care will be provided to the newborn baby and to the mother. If resuscitation is necessary, NRP guidelines should be followed.

The mother will experience some bleeding during and after labor. Approximately 500cc is normal. Normal bleeding will cease after the delivery of the placenta, as the uterus contracts. Post-natal bleeding should be aimed at assisting the uterus to contract via breastfeeding, fundal massage, and pharmacological measures. Field delivery, though rare for a HEMS team, should be planned for and prepared for so that the team can help provide the best possible outcome for babies and mothers.

References
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