Obstetrical Emergencies

Purpose: To provide the process for the assessment and management of the patient with an obstetrical related emergency.

Pre-Medical Control

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow **General Pre-hospital Care Protocol**
2. Assessment Information
    A. History:
        a. Past Medical History: previous births, previous complications
        b. Current History: duration of gestation (weeks), whether single or multiple births are expected.
    B. Specific Objective Findings: vital signs, assess contractions
    C. Determine whether to transport or remain at scene due to imminent delivery. Indications of impending imminent delivery may include:
        a. Multiples pregnancy, strong regular contractions, every 2 minutes or less; ruptured membrane, bloody show, sensation of need to push or bear down, crowning.
3. General Management
    A. Utilize universal precautions
    B. Evaluate and maintain airway, provide oxygen and support ventilation as needed.
4. Evaluate for signs of **Pre-eclampsia/Eclampsia/HELLP Syndrome** (Hemolysis Elevated Liver Enzymes Low Platelet counts) Signs include
    a. BP 160/110 or higher (preeclampsia)
    b. Marked peripheral edema (preeclampsia)
    c. Constant right upper quadrant pain (HELLP)
    d. Visual changes or impairment (HELLP)
    e. Diminished level of consciousness (eclampsia)
    f. Seizure (eclampsia)

A. Immediate transport

PARAMEDIC

B. If seizure occurs, administer Magnesium Sulfate 2 gm over 10 minutes IV/IO until seizure stops. Administration of Magnesium Sulfate is best accomplished by adding Magnesium Sulfate 2gm to 100 or 250 ml of NS and infusing over approximately 10 minutes.
C. If seizure does not stop after Magnesium, then administer Benzodiazepine as specified below.
D. If an IV has not been established administer Midazolam 10 mg IM, if patient is actively seizing.
E. If an IV has already been established and Midazolam IM has not been administered, administer Midazolam, Lorazepam, or Diazepam slow IV push until seizure stops, per MCA selection

MCA Name: Jackson County MCA
MCA Board Approval Date: November 25, 2014
MDCH Approval Date:
MCA Implementation Date: January 01, 2015

Medication Options:
(Choose One)

[X] Midazolam 5 mg IV/IO
OR
[ ] Lorazepam - 4 mg IV/IO
OR
[ ] Diazepam - 10 mg IV/IO or rectally

If seizure persists, per MCA selection, repeat Midazolam, Lorazepam or Diazepam at the same dose or contact medical control for further instructions.

Post-Medical Control

PARAMEDIC

F. If seizure persists, administer additional Magnesium Sulfate 2 gms IV/IO, if available.

5. MANAGEMENT OF NORMAL DELIVERY

SPECIALIST/PARAMEDIC

A. Obtain vascular access, if time permits.

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B. Have oxygen, suction, and other needed equipment readily available for care of the newborn.

C. **If signs of newborn delivery are imminent, and there is no time to transport, prepare for delivery.**

a) Try to find a place for maximum privacy and cleanliness.
b) Place patient in position of comfort for impending delivery (laying on left side or on hands and knees).
    a. Monitor patient for signs of hypotension. If signs develop, position patient so weight of uterus is to patient's left side.
c) Drape if possible, using clean sheets.
d) Encourage mother to relax and take slow deep breaths through her mouth.
e) Reassure her throughout procedure.
f) As baby's head begins to emerge from vagina, support it gently with hand and towel to prevent an explosive delivery. a. Routine suction of the nose and mouth at the perineum is no longer recommended.
g) After head is delivered look and feel to see if cord is wrapped around baby's neck.
    a. If the cord is around neck and loose, slide gently – over the head **DO NOT TUG.**

b. **If the cord is around neck and snug**, clamp the cord with 2 clamps and cut between the clamps. Once this is done delivery should be expedited.

h) As the shoulders deliver, carefully hold and support the head and shoulders as the body delivers, usually very suddenly – and the baby is very slippery! **Note the time of delivery**.

i) Clear the airway only if necessary. If the newborn is vigorous (strong respiratory effort, good muscle tone, and a heart rate > 100 bpm), there is no need to suction the airway, even if meconium was in the amniotic fluid or there was meconium staining.

D. **If there is visible meconium in the airway and the newborn is having difficulty breathing, has poor muscle tone, or has a heart rate less than 100bpm**

a. Suction the airway.

PARAMEDIC

b. refer to the **Pediatric Newborn Assessment, Treatment and Resuscitation Protocol** for management: Page 3, 9. C. a and b.

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E. Prevent heat loss

a. Place baby on mother (preferably skin to skin).

b. Stimulate the baby

c. Dry baby off and remove all wet linen.

F. Evaluate respirations

a. If the baby does not breathe spontaneously, stimulate by gently rubbing its back or thumping the soles of its feet. If still no response, initiate management per Pediatric Newborn Assessment, Treatment and Resuscitation Protocol.

b. If spontaneous breathing begins, administer oxygen for a few minutes until baby's color is pink

G. Cord Clamping

a. The umbilical cord **should not** be cut immediately; wait until the child is breathing adequately, the cord has stopped pulsating or, in the vigorous infant, a minimum of **two to three minutes post delivery**. When prepared to cut the cord, it must be tied or clamped approximately 8" from the infant's abdominal wall with a second tie or clamp 2" further. The cord should be cut between the ties / clamps.

b. If child is being resuscitated, the cord may be clamped and cut and kept moist with a small dressing. (In case Umbilical Vein IV is needed for hospital use only.)

c. Score APGAR at one minute and five minutes after delivery. Refer to **Pediatric Newborn Assessment, Treatment and Resuscitation Protocol** if APGAR is less than 6.

d. Encourage breastfeeding to stimulate placental delivery.

e. When delivery of baby is complete, prepare for immediate transport. Placenta can be delivered in route or at the hospital

f. Delivery of placenta generally takes place within 20 minutes.

g. Following placental delivery, massage the uterus firmly and briskly to aid in contraction of the uterus and prevent hemorrhage.
h. Place placenta in basin or plastic bag and transport with mother.
i. Contact Medical Control.

6. MANAGEMENT OF COMPLICATED DELIVERIES
MFR/EMT/SPECIALIST/PARAMEDIC
A. Contact Medical Control as soon as appropriate.
B. **Breech position**

a. Allow buttocks and trunk to deliver spontaneously.
b. Once legs are clear, support body on the palm of your hand and surface of your arm, allowing head to deliver. Do not put traction on the head.
c. If the head doesn't deliver immediately, transport rapidly to the hospital with mother's buttocks elevated on pillows with baby's airway maintained throughout transfer.
d. Place **gloved** hand in the vagina with your palm towards the baby's face. Form a "V" with your fingers on either side of the baby's nose and push the vaginal wall away from baby's face until the head is delivered.
e. Prolapsed Cord – Life Threatening Condition i. Place mother in a supine position with hips supported on a pillow.

ii. Evaluate and maintain airway, provide oxygen.
iii. With sterile gloved hand, gently push the baby up the vagina several inches to release pressure on the cord.
iv. DO NOT ATEMPT TO PUSH CORD BACK!
v. Transport maintaining pressure on baby's head.

f. Arm or limb presentation – Life threatening condition.

i. Immediate transportation
ii. Delivery should not be attempted outside the hospital.
iii. Place mother in position of comfort or with hips elevated on pillow.
iv. Evaluate and maintain airway, provide oxygen.

g. Multiple births

i. Immediate transportation
ii. Multiple birth infants are potentially smaller in size and will need careful management to maintain body temperature.
iii. After first infant is delivered, clamp cord and proceed through airway, drying and warming procedures while awaiting delivery of other births, (See **Pediatric Newborn Assessment, Treatment and Resuscitation Protocol** .)
iv. Prepare additional supplies for subsequent births.
v. There may be time to transport between births.

h. Premature births

i. Immediate transportation

ii. Premature infants are usually very small, have difficulty maintaining temperatures and are likely to need significant resuscitative support.
iii. Refer to the **Pediatric Newborn Assessment, Treatment and Resuscitation Protocol** for management of premature infants.

MFR/EMT/SPECIALIST/PARAMEDIC
APGAR Scoring
1. Procedure for immediately evaluating a newborn baby.
A. Based on:
a. A – appearance (color)
b. P – pulse (heart rate)
c. G – grimace (reflex irritability to slap on sole of foot)
d. A – activity (muscle tone)
e. R – respiration (respiratory effort)

2. Each parameter gets a score of 0 to 2.
3. APGAR score should be checked at 1 minutes and 5 minutes post delivery.
4. In cases of depressed APGAR scores (below 7 or poorly responsive) refer to **Pediatric Newborn Assessment, Treatment and Resuscitation Protocol.**

APGAR SCORING

Sign	0	1	2
Appearance – skin color	Bluish or paleness	Pink or ruddy; hands or feet are blue	Pink or ruddy; entire body
Pulse – heart rate	Absent	Below 100	Over 100
Grimace – reflex irritability to foot slap	No response	Crying; some motion	Crying; vigorous
Activity – muscle tone	Limp	Some flexion of extremities	Active; good motion in extremities
Respiratory effort	Absent	Slow and Irregular	Normal; crying