# **OBSTETRICS GYNECOLOGY**

Revised: August 2016

# **APGAR SCORING CHART**

Sign	0	1	2	1 Minute	5 Minute
Appearance	Blue or pale	Body pink	Completely		
(Color)		with blue extremities	pink		
Pulse	Absent	<100	>100		
(Heart rate)					
Grimace	No response	Some motion,	Vigorous		
(Irritability)		or crying	crying		
Activity	Flaccid or	Poor	Active		
	limp		motion		
Respiratory	Absent	Slow,	Good effort,		
Effort		irregular	crying		

# **ABNORMAL DELIVERY**

NOTE: Rapid transport to an appropriate receiving facility is indicated for any abnormal presentation or other condition causing prolonged labor.

## FR/BLS TREATMENT:

- 1. INITIAL MEDICAL CARE.
- 2. Exam perineum.
- 3. If prolapsed cord is noted:
  - a. Assist mother to flex her knees on her chest.
  - b. Insert a sterile gloved hand into the vagina and lift baby off the umbilical cord.
  - c. DO NOT REMOVE YOUR HAND.
  - d. Cover exposed portion of cord with saline-moistened sterile dressing.
- 4. If breech presentation is noted and labor has stopped:
  - a. Insert sterile gloved hand into vagina forming a "V" around baby's nose during delivery of the head following delivery of the body.
- 5. If breech delivery is imminent:
  - a. Deliver with steady traction to the shoulder level. Sweep each arm over the chest.
  - b. Deliver the head with traction and extension.
- 6. If shoulder dystocia noted:
  - a. If head is delivered, apply steady downward and posterior traction. This may dislodge shoulder.
  - b. If shoulder not dislodged, flex patient's knees on her abdomen and continue steady traction.
  - c. If a second provider is available, have them push straight down on the pubic symphysis to help dislodge the shoulder.
- 7. Clamp and cut the cord as soon as time allows after cord stops pulsating.
- 8. Resuscitate if needed.
- 9. Call for intercept per INTERCEPT CRITERIA.

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## **ILS/ALS TREATMENT:**

- 1. Continue **FR/BLS TREATMENT**.
- 2. Assess fetal heart tones via Doppler if available.
- 3. Consider IV NS KVO or 20 ml/kg fluid bolus to maintain SBP of 90-100.

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# **MECONIUM ASPIRATION**

NOTE: It may not be possible to clear the airway of all meconium before the need to initiate ventilation.

## FR/BLS TREATMENT:

- 1. Complete delivery.
- 2. If baby cries right away begin routine neonatal care. *This is true even if meconium is present.*
- 3. If baby does not cry, and thick/particulate meconium present after delivery:
  - a. Continue to suction the airway until clear.
  - b. Ventilate between suctioning attempts with BVM if needed.
- 4. Record APGAR score at 1 and 5 minutes.
- 5. Continue routine neonatal care; dry, warm, position, suction and stimulate.
- 6. Administer supplemental OXYGEN as needed. If respirations are inadequate and/or heart rate is <100, refer to the NEONATAL RESUSCITATION protocol.
- 7. Initiate transport\*\* and call for intercept per INTERCEPT CRITERIA.
- 8. Contact Medical Control.

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## **ILS/ALS TREATMENT:**

- 1. Continue **FR/BLS TREATMENT**.
- 2. If baby does not cry right away and meconium is thick and particulate:
  - a. Visualize the hypopharynx with a laryngoscope.
  - b. Remove any residual meconium with large bore catheter.
  - c. Intubate the trachea with ET tube and meconium aspiration adapter.
  - d. Apply suction to the ET tube (no more than 100 mm Hg) and slowly remove the ET tube from the trachea.
  - e. Re-intubate with a new ET tube and repeat suctioning until aspiration material is clear.
- 3. If infant is unstable, ventilation may be required prior to removal of all meconium.
- 4. Proceed with neonatal resuscitation as needed.

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\*\* Only if transporting agency

# **NEONATAL RESUSCITATION**

NOTE: Priorities for neonatal resuscitation include management of airway, breathing, circulation and temperature maintenance.

## FR/BLS TREATMENT:

- 1. Dry neonate thoroughly and keep warm throughout transport.
- 2. Position and suction mouth, then nose as needed.
- 3. Gentle stimulation and repositioning as needed.
- 4. If meconium staining is present, refer to MECONIUM ASPIRATION protocol.
- 5. Evaluate respirations:
  - a. If respirations are adequate but cyanosis is present, administer supplemental OXYGEN by blow by technique.
  - b. If supplemental oxygen, BVM ventilation, or persistent cyanosis is present, apply pulse oximeter to right upper extremity (pre-ductal). For up to 10 minutes after birth, it may be NORMAL for SpO2 to be 70-80%. Newborn heart rate is best predictor of oxygenation and response to resuscitation.
  - c. If neonate is apneic or respirations are inadequate, ventilate with BVM and 100% oxygen at 40-60 breaths/minute.
  - d. Reassess every 30 seconds.
  - e. If unable to adequately ventilate, consider intubation and refer to Pediatric Universal Airway Management Algorithm.
  - f. If baby does not cry right away and meconium is thick and particulate:
    - i. Visualize the hypopharynx with a laryngoscope.
    - ii. Remove any residual meconium with large bore catheter. iii. Intubate the trachea with ET tube and meconium aspiration adapter.
    - iv. Apply suction to the ET tube (no more than 100 mm Hg) and slowly remove the ET tube from the trachea.
    - v. Re-intubate with a new ET tube and repeat suctioning until aspiration material is clear.
- 6. Evaluate heart rate:
  - a. If heart rate is > 100, monitor and transport.
  - b. If heart rate is < 100, ventilate with BVM and 100% oxygen.
  - c. If heart rate <60, continue ventilation at 40-60/min and administer chest compressions, ratio of 3:1 compressions to ventilations (120/min).
- 7. Evaluate skin color:
  - a. If skin is pink or pink with peripheral cyanosis, monitor.
  - b. If skin is cyanotic throughout, administer supplemental OXYGEN by blow-by technique.
- 8. Initiate transport. \*\* Call for intercept per INTERCEPT CRITERIA.
- 9. Contact Medical Control.

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# **ILS/ALS TREATMENT:**

- 1. Continue FR/BLS TREATMENT.
- 2. If heart rate < 60 despite ventilations and chest compressions:
  - a. Continue ventilations and chest compressions and consider endotracheal intubation.
  - b. Administer EPINEPHRINE (1:10,000) 0.01 mg/kg ET/IV/IO every 3-5 minutes, as needed.
  - c. Establish vascular access.
  - d. IV NS at KVO; consider fluid bolus of 10 ml/kg.

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3. Consider NARCAN 0.1 mg/kg ET/IV/IO/SQ.

\*\*Only if transporting agency

# **NORMAL DELIVERY**

#### **EXCLUSIONS:**

- 1. Pre-term labor
- 2. Abnormal presentation (i.e. breech, prolapsed cord, limb)

#### FR/BLS TREATMENT:

- 1. INITIAL MEDICAL CARE.
- 2. Exam perineum for crowning.
- 3. If crowning is not present:
  - a. Prepare for transport. Consider transporting patient in left lateral recumbent position if able.
  - b. Frequently reassess for crowning.
- 4. If crowning present, prepare for delivery:
  - a. Encourage the patient to perform slow steady pushes with contractions.
  - a. Support the head with gentle pressure as it presents.
  - b. After delivery of head, suction airway orally then nasally.
  - c. Check for and reduce a nuchal cord if present
  - d. Keep baby positioned level with mother's heart until cord is cut.
  - e. Place baby on maternal chest / abdomen for warmth, skin to skin contact (if applicable).
- 5. Deliver infant normally and record APGAR scores at 1 and 5 minutes.
- 6. Provide routine neonatal care (dry, warm, position, suction, stimulate).
- 7. The cord should be clamped, and then cut after pulsations of the cord stop.
- 8. Wrap baby to preserve warmth, and place on mother's abdomen or chest.
- 9. Consider massaging uterus to control bleeding.
- 10. Consider placenta delivery if extended ETA. **Never pull on cord in an attempt to hasten delivery.**
- 11. Call for intercept per INTERCEPT CRITERIA.

# **ILS/ALS TREATMENT:**

- 1. Continue FR/BLS TREATMENT.
- 2. Consider IV NS KVO or 20 ml/kg fluid bolus to maintain SBP of 90-100.

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# PRE-ECLAMPSIA

NOTE: If seizure activity occurs in the pre-eclamptic patient, refer to the Seizure protocol and contact Medical Control.

## **CRITERIA:**

- 1. Last trimester through 2 weeks following delivery with both of the following:
  - a. SBP > 140/90
  - b. Facial or extremity edema

# FR/BLS TREATMENT:

- 1. INITIAL MEDICAL CARE.
- 2. Assessment and history; attempt to minimize external stimuli.
- 3. Place patient in left lateral recumbent position.
- 4. Call for intercept per INTERCEPT CRITERIA.

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## **ILS/ALS TREATMENT:**

- 1. Continue FR/BLS TREATMENT.
- 2. IV NS KVO or saline lock.

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# PRE-TERM LABOR/DELIVERY

**NOTE:** If pre-term delivery occurs, refer to neonatal resuscitation protocol as needed.

#### **CRITERIA:**

- 1. Less than 36 weeks gestation
- 2. Contractions regular.

## **EXCLUSION:**

1. Abnormal presentation

# **FR/BLS TREATMENT:**

- 1. INITIAL MEDICAL CARE.
- 2. Exam perineum for crowning.
- 3. Obtain history of pregnancy and pre-natal care.
- 4. Place patient in left lateral recumbent position.
- 5. Refer to NORMAL DELIVERY protocol if needed.
- 6. Call for intercept per INTERCEPT CRITERIA.

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# **ILS/ALS TREATMENT:**

- 1. Continue FR/BLS TREATMENT.
- 2. IV NS at KVO or saline lock.
- 3. If bleeding develops, consider 20 ml/kg fluid bolus of NS to maintain SBP of 90-100.

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# **VAGINAL BLEEDING**

**CRITERIA:** Any may be present

- 1. Severe vaginal bleeding during pregnancy
- 2. Severe vaginal bleeding during or after delivery

## FR/BLS TREATMENT:

- 1. INITIAL MEDICAL CARE.
- 2. Exam perineum.
- 3. Obtain history of pregnancy and pre-natal care.
- 4. Massage uterus if bleeding is post-delivery.
- 5. Place patient in left lateral position and elevate legs if able.
- 6. Call for intercept per INTERCEPT CRITERIA.

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# **ILS/ALS TREATMENT:**

- 1. Continue FR/BLS TREATMENT.
- 2. Administer 20 ml/kg NS or LR fluid bolus to maintain SBP 90-100.

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