COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY / PROCEDURE / PROTOCOL

Number S-133
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SUBJECT: TREATMENT PROTOCOL
OBSTETRICAL EMERGENCIES / NEWBORN DELIVERIES

Date 07/01/2021

PREDELIVERY	
BLS	**ALS**
• Ensure patent airway • O_2 saturation PRN • O_2 and/or ventilate PRN • If no time for transport and delivery is imminent (crowning and pushing), proceed with delivery • If no delivery, transport on left side • Keep mother warm **Third-trimester bleeding** • Transport immediately to facility with obstetrical services per BH direction **Eclampsia (seizures)** • Protect airway • Protect from injury	• Monitor/EKG • IV SO • Capnography SO PRN **Direct to labor/delivery area BHO if ≥20 weeks gestation** **Eclampsia (seizures)** • Midazolam IN/IM/IV/IO SO to a max dose of 5 mg (d/c if seizure stops) SO, MR x1 in 10 min SO. Max 10 mg total.

DELIVERY
BLS and ALS
Routine delivery • If placenta delivered, massage fundus. Do not wait on scene. • Wait 60 sec after delivery, then clamp and cut cord between clamps • Document name of person cutting cord, time cut, and delivery location (address) • Place identification bands on mother and newborn(s) • Complete Out of Hospital Birth Report Form (S-166A) and provide to parent **Difficult deliveries** • High-flow O_2 • Keep mother warm **Nuchal cord (cord wrapped around neck)** • Slip cord over the head and off neck • Clamp and cut cord, if wrapped too tightly **Prolapsed cord** • Place mother with her hips elevated on pillows • Insert a gloved hand into vagina and gently push presenting part off cord • Transport immediately while retaining this position. Do not remove hand until relieved by hospital personnel. • Cover exposed cord with saline-soaked gauze

Shoulder dystocia
- Hyperflex mother's knees to her chest

Breech birth (arm or single foot visible)
- Rapid transport

Frank breech or double footling and imminent delivery with long transport
- Allow newborn to deliver to the waist without active assistance (support only)
- When legs and buttocks are delivered, assist head out keeping body parallel to the ground. If head does not deliver within 1-2 min, insert gloved hand into the vagina to create airway for newborn.
- Transport immediately if head undelivered

Eclampsia (seizures)
- Protect airway, and protect from injury
- **ALS:** Midazolam IN/IM/IV/IO SO to a max dose of 5 mg (d/c if seizure stops) SO, MR x1 in 10 min SO. Max 10 mg total.

MOTHER POST-DELIVERY

BLS	ALS
Post-partum hemorrhage • Massage fundus vigorously • Baby to breast • High-flow O_2 • Keep mother warm **Eclampsia (seizures)** • Protect airway • Protect from injury	**Post-partum hemorrhage** • Monitor/EKG • Capnography **Post-partum hemorrhage with SBP <90 mmHg** • 500 mL fluid bolus IV/IO PRN SO, MR x2 q10 min SO **Eclampsia (seizures)** • Midazolam IN/IM/IV/IO SO to a max dose of 5 mg (d/c if seizure stops) SO, MR x1 in 10 min SO. Max 10 mg total.

NEONATAL POST-DELIVERY

BLS and ALS

Warm, dry, and stimulate newborn
- Wrap newborn in warm, dry blanket. Keep head warm.
- Assess breathing, tone, and HR. Palpate HR via umbilical cord.
- If placing pulse oximeter, use newborn's right hand
- APGAR at 1 and 5 min (do not delay resuscitation to obtain score)
- Confirm identification bands placed on mother and newborns(s)
- Bring mother and newborn(s) to same hospital
- Complete Out of Hospital Birth Report Form (S-166A) and provide to parent

Full-term newborn with good tone and breathing
- Keep newborn warm

- Ensure patent airway
- If excessive secretions, suction mouth then nose with bulb syringe
- O_2 saturation on newborn's right hand PRN
- Baby to breast
- Ongoing assessment q30 sec

Newborn HR ≥100 without respiratory distress or central cyanosis

- Blow-by O_2

Newborn HR <100, poor respiratory effort or persistent central cyanosis

- Ventilate with BVM on room air
- Monitor/EKG
- Recheck pulse q30 sec
- For persistently poor respiratory rate/effort, or cyanosis despite correct BVM technique, add high-flow O_2 15 L/min to BVM
- **Stop BVM when patient breathing well and HR ≥100**
- **ALS**: IV/IO SO (do not delay transport)
- **ALS**: NG tube PRN SO

Newborn HR <60 after BVM on high-flow O_2 for 30 sec

- Continue BVM with O_2
- Chest compressions at rate of 120/min
- 3:1 compression to ventilation ratio
- Check pulse q2 min
- Stop compressions when HR ≥60
- If HR remains <60 after 90 sec of ventilation, increase to BVM 100% O_2 and continue compressions
- **ALS**: Push-dose epinephrine 1:100,000 (0.01 mg/mL) per drug chart IV/IO BHO, MR q3 min, titrate to maintain adequate perfusion BHO

Push-dose epinephrine mixing instructions

1. Remove 1 mL normal saline (NS) from the 10 mL NS syringe
2. Add 1 mL of epinephrine 1:10,000 (0.1 mg/mL) to 9 mL NS syringe

The mixture now has 10 mL of epinephrine at 0.01 mg/mL (10 mcg/mL) concentration.

- **ALS:** Fluid bolus per drug chart IV/IO SO, MR x 1 in 10 min SO

Premature and/or low birth weight newborn

- If amniotic sac intact, remove neonate from sac after delivery
- Place neonate in plastic bag up to axilla to minimize heat loss
- Transport immediately
- CPR need **not** be initiated if there are no signs of life **and** gestational age <24 weeks