Santa Clara Valley Medical Center – Delayed Cord Clamping Guidelines

Inclusion Criteria for Delayed Cord Clamping (DCC):

All infants delivering at SCVMC at any gestational age is eligible to have at least 1 minute of delayed cord clamping.

Special condition:

- Meconium stained fluid – is not a contraindication for DCC as long as the newborn is vigorous at birth.
- HIV - is not a contraindication for DCC.
- In Twin to Twin transfusion syndromes – discuss with the OB to determine the donor of TTS at delivery. We recommend DCC for donor twin at delivery.
- Crash c/sections for fetal distress – is not a contraindication for DCC as long as the newborn is spontaneously breathing.

Exclusion Criteria for DCC:

- Placental abruption with active bleeding and requiring immediate delivery
- Cord avulsion/tear or damage/disruption of placenta during delivery
- Anemia due to Isoimmunization
- Recipient twin in twin to twin transfusion syndrome
- Hydropic infants
- Apneic apparently "lifeless" infant, or no spontaneous respiration by 20-30secs

When to interrupt / Discontinue DCC:

- If infant does not have any respirations even after 30seconds of stimulation during DCC, milk the cord x4 and then cut the cord.
- If there is active bleeding due to placental laceration, abruption, cord avulsion, true knot, clamp and cut the cord.

Special Considerations:
Anemia due to Isoimmunization may be a contraindication for DCC.
General anesthesia is not a contraindication by itself as long as the baby is breathing. If the baby is apneic discontinue DCC.

Method of DCC:

Our DCC protocol was developed based on the published methods.[11,14,24] After delivery, the preterm infant should be held by a pediatric provider in a polyethylene wrap with a towel and a chemical warming mattress underneath. Late preterm and term infant should be held in the warm towel by the obstetric provider when no pediatric provider is present at the delivery. The infant should be held as low as possible, without creating tension on the cord, below the level of the mother's introitus at vaginal delivery or below the level of incision at cesarean section (CS). Gentle stimulation and bulb suctioning should be performed prior to cord clamping. After the infant was delivered, a provider verbalized the time in 5-10s intervals. The obstetrician then clamped and cut the cord at 60s. Apgars were assigned from the time of birth.

Documentation:

- Duration of DCC
- Reason for No DCC

- Reason for interruption of DCC
- Time of onset of respirations

References:

11. Kugelman A, Borenstein-Levin L, Riskin A, et al. Immediate versus delayed umbilical cord clamping in premature neonates born < 35 weeks: a prospective, randomized, controlled study. American journal of perinatology 2007;24:307-15.

14. Mercer JS, Vohr BR, McGrath MM, Padbury JF, Wallach M, Oh W. Delayed cord clamping in very preterm infants reduces the incidence of intraventricular hemorrhage and late-onset sepsis: a randomized, controlled trial. Pediatrics 2006;117:1235-42.

24. Rabe H, Wacker A, Hülskamp G, et al. A randomised controlled trial of delayed cord clamping in very low birth weight preterm infants. European journal of pediatrics 2000;159:775-7.