DELAYED CORD CLAMPING

- Current evidence suggests delayed cord clamping (DCC) is safe and can confer benefits to term and preterm babies
  - supporting transition to extra-uterine life
  - associated with improved neonatal outcomes and reduced mortality
- ILCOR, RCOG, NICE, Resuscitation Council (UK) and WHO all recommend DCC for ≥1 min in stable babies, but state that resuscitation should take priority in unstable babies

INDICATIONS

- Beneficial for all babies (especially preterm)
- When immediate resuscitation required, resuscitation with intact cord can be performed (if appropriate equipment available)

CONTRAINDICATIONS

- Monochorionic twins
- Conditions where placental circulation is not intact, including:
  - placental abruption
  - bleeding placenta praevia
  - bleeding vasa praevia
  - cord avulsion
- Antenatally diagnosed congenital abnormalities that may require medical intervention immediately after birth e.g.:
  - congenital diaphragmatic hernia
  - gastroschisis
  - CCAM with thoraco-amniotic shunt
- Babies at high risk of a blood-based infection (e.g. newly diagnosed HIV or hepatitis)
  - most mothers who have low viral loads can safely have DCC
- Acute maternal obstetric emergency
- Baby requires immediate resuscitation

EQUIPMENT

- Neopuff™
- Single patient use face mask
- Suction
- Plastic bag
- Thermometer/temperature monitoring equipment
- If available, platforms, e.g. LifeStart™ or Concord® trolley allow for assisted transition and stabilisation of babies whilst allowing for DCC

PROCEDURE

Pre-delivery

- Discuss benefits and risks of DCC with parents in antenatal appointments and before delivery
- Provide parents with:
  - opportunity to ask questions
  - parental information leaflet
- Parents have a choice to decline DCC − decision should be respected and supported by the team
- Discuss plan for DCC with intact cord stabilisation with midwife/obstetrician before delivery

During delivery

- Babies born to parents who have consented to DCC to receive ≥1 min of DCC, unless clinically contraindicated

Milking of the cord contraindicated and associated with increased incidence of severe IVH in preterm babies <28 weeks' gestation

- Babies ≥28 weeks', if DCC not possible, umbilical cord milking recommended
- Following delivery, dry and wrap baby, or if <32 weeks' gestation and hat applied, place immediately into plastic bag
- **Vaginal birth:** hold baby below level of perineum, or if appropriate, place baby skin-to-skin with mother following drying and stimulation
- use pre-warmed towels from resuscitaire to keep baby warm
- **Caesarean section delivery:** hold baby below level of incision site
- prevent heat loss, e.g. place sterile towel over baby, whilst allowing for drying and stimulation
- Where facilities (e.g. LifeStart™ or Concord® trolley) available, assisted transition and assessment may be commenced while undergoing DCC
- commence stabilisation as per NLS guidelines (see **Resuscitation** guideline)
- If deemed more appropriate by obstetric/neonatal team (i.e. in situations where cord is very short) and baby seen to be vigorous − perform DCC without equipment
- may not allow assessment of heart rate, tone etc. during initial minute
- Babies born within intact amniotic sac:
- placental circulation is interrupted
- delay cord clamping until cord pulsations stop or up to 1 min if baby is vigorous
- deliver baby into cot
- rupture sac
- if preterm, place baby in plastic bag and transfer to resuscitaire
- if cord pulsations stopped, clamp cord
- If baby requires intubation/chest compressions, ask for umbilical cord to be cut immediately and commence NLS stabilisation
- Do not delay administration of prophylactic syntocinon

AFTERCARE

- Record timing of cord clamping in medical notes

COMPLICATIONS

- Jaundice requiring phototherapy (usually mild)
- Hypothermia