

# CANNULATION – PERIPHERAL VENOUS

## INDICATIONS

- Access for IV infusion and medications

## CONTRAINDICATIONS

- Bruised, swollen or broken skin

## EQUIPMENT

- Alcohol wipes
- Sucrose 24% solution if MEBM is not available
- Appropriate blood bottles and electronic or paper requests as required
- Non-sterile disposable gloves and paper towel beneath preferred site
- 24 G cannula
- T-piece connected to a 5mL syringe of sodium chloride 0.9%, flushed and ready
- Steristrips, tegaderm to secure cannula
- Cotton wool or gauze for blood absorption and pressure area relief under cannula hub
- Arm splint to position cannula

## PROCEDURE

### Preparation

- Inform parents before procedure if possible. They can be present to give comfort to baby.
- Local anaesthetic cream not used in neonates. See **Pain assessment and management** guideline for advice on alternatives.
- Use comfort care aids including swaddling, dummy, comfort holding, MEBM/sucrose
- Identify suitable vein, which should be clearly visible. Unlike in adults, neonatal veins are rarely palpable
  - scalp: shave area if using scalp vein (do not use as first priority site)
- Avoid potential long line sites if baby is likely to need multiple cannulations
- It can be helpful to flush cannula with sodium chloride 0.9% to assist in identification of point at which cannula enters vein. If blood samples taken at time of cannula insertion, **do not** flush cannula as this will contaminate sample for analysis
- Wash hands and put on gloves

### Insertion

- Apply mild hand pressure around limb to distend vein
- Pull skin taut by applying thumb slightly distal to proposed puncture site
- Hold cannula at 10–20° angle and puncture skin
- Advance cannula toward vein
  - resistance may diminish slightly as it enters vein and a speck of blood may be seen in hub of needle (this is easier to see if cannula has been flushed with sodium chloride 0.9%). **Do not** advance needle further as it can pierce back wall of vein
- When this occurs, hold needle steady and advance cannula a short distance within vein
- Withdraw needle from cannula
- Connect T-piece and flush cannula gently with sodium chloride 0.9% 0.5 mL to confirm it is in the vein
- Secure cannula with steristrips and clear dressing (e.g. Tegaderm™) to ensure IV site visible at all times, and connect to infusion
- There is minimal evidence that use of a splint prolongs the life of a cannula however it can aid infusion pressures.

### Documentation

- Record date, time and site of cannula insertion on Peripheral Venous Device (PVD) form
- Record date, time and reason for removal of cannula
- Document visual phlebitis scoring for ongoing monitoring of cannula on PVD form