

CANNULATION – PERIPHERAL VENOUS

INDICATIONS

- Access for IV infusion and medications

CONTRAINDICATIONS

- Sore or broken skin

EQUIPMENT

- Cleaning solution (see local Trust policy)
- Appropriate blood bottles and request cards
- Non-sterile disposable gloves
- 24 G cannula
- T-piece connected to a syringe of sodium chloride 0.9%, flushed and ready
- Steristrips, tegaderm and splint to secure cannula
- 3-way tap if necessary

Local anaesthetic cream is not used in neonates – see Pain assessment and management guideline for advice on suitable alternatives

PROCEDURE

Preparation

- Identify suitable site:
 - preferably back of hand or foot
 - save long saphenous and antecubital fossa veins for long line insertion
 - scalp: shave area if using scalp vein (do not use as first priority site)
- Inform parents before procedure if possible
- Identify suitable vein, which should be clearly visible. Unlike in adults, neonatal veins are rarely palpable

If baby likely to need numerous cannulations, avoid using potential long line veins

- 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 hand pressure around limb to distend vein
- Place thumb on skin 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™/Opsite) to ensure IV site visible at all times, and connect to infusion

Documentation

- Record date, time and site of cannula insertion in notes with identification and signature of person carrying out procedure (using local peripheral vascular device record form)
- Record date and time of removal of cannula
- Use visual phlebitis scoring for ongoing monitoring of cannula, according to local Trust policy