

Paediatric Peripheral Venepuncture

Introduction

- Wash hands, Introduce self, Patients name & DOB & wrist band, Explain procedure and get consent from parents (or child if appropriate)
- Analgesia options (not for neonates)
 - Topical local anaesthetic cream (e.g. Ametop) applied under a film dressing – takes 30 minutes to work
 - Ethyl chloride 'cold' spray
- Depending on age of child, ensure 1-2 assistants are available to hold child still



Preparation part

- Wash hands
- Clean tray
- Gather equipment around tray (think through what you need in order)
 - Gloves
 - Alcohol 70%/chlorhexidine 2% skin cleansing swab
 - For neonates/infants
 - 22-23G single winged open-ended needle *or* 21-23G butterfly needle without normal tubing *or* yellow (24G) cannula
 - For older children
 - Ethyl chloride spray if local anaesthetic cream has not been used
 - Tourniquet
 - Blue butterfly needle
 - 10ml syringe
 - Required blood tubes
 - **Green** (coagulation) – clotting (minimum volume required 1.3ml)
 - **Orange** (Lithium-heparin) – U&Es and other biochemistry
 - **Red** (EDTA) – FBC
 - Blood culture (yellow top) – use syringe to collect blood then decant (minimum volume required 1ml) *NB. For a neonate/infant, use a yellow cannula and aspirate the bevel each time it fills with a 5ml syringe and needle*
 - G&S is taken in an adult purple EDTA tube (minimum volume required $\frac{1}{3}$ tube) – *must be labelled by hand*
 - Cotton gauze swabs
 - Tape or plaster
- Wash hands
- Open packets and place equipment neatly in tray in plastic parts of packets (without touching the instruments themselves)
- For older children, attach 10ml syringe to butterfly needle
- For neonates/infants, open the collection tubes and rest inside a roll of tape for easy filling
- Return to patient (with tray and sharps bin)

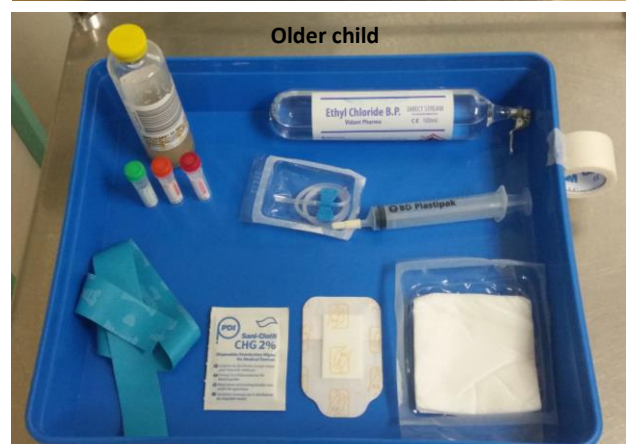
Patient part

Vein identification

- Wash hands
- Identify suitable vein – in older children, try to find a vein you can feel; in infants/neonates, look for a suitable vein (dorsal hand is usually best)
- Tourniquet
 - Neonate/infant: if using the dorsal hand, hold their wrist flexed with your non-dominant hand with your index and middle fingers over the dorsum and your thumb over their fingers
 - <10 years, assistant can squeeze limb
 - >10 years, use rubber tourniquet

Procedure

- Wash hands
- Put on gloves
- Sterilise area – wipe in spiral motion working outwards and wait 30 seconds for it to dry
- Re-apply tourniquet if using



- Anchor the skin distally with non-dominant hand and insert the needle at 20-30° to the skin with the dominant hand
- For neonates/infants, allow the blood to drip from the end of the needle into the collection tubes (if you hold the wrist steady, the needle should stay in place on its own while you use your dominant hand to place the tubes under the dripping blood stream)
- For older children, hold the needle securely in place against their arm with your dominant hand, while you use your non-dominant hand to aspirate the syringe
- Once complete, remove tourniquet with the non-dominant hand (if present)
- Hold a cotton wool gauze firmly over the puncture site with non-dominant hand and remove the needle and put in the sharps bin
- Hold pressure over puncture site until it has stopped bleeding; then tape gauze down over puncture site or apply plaster
- If using a syringe, decant the blood into the tubes. If doing blood cultures, apply a green needle to the syringe and pierce the blood culture bottle to fill.
- Replace the lids on the blood collection bottles and gently invert a few times

To complete

- Thank patient
- Bin waste and gloves, clean tray and wash hands
- Fill in blood bottle labels, put in bags with printed request forms, send to the lab
- Document procedure and tests requested in patients notes