Phlebotomy Procedure

Equipment Needed
- Tray
- Hand decontaminant.
- Glove appropriate size.
- Tourniquet.
- Alcohol swabs 70%.
- Vacuette or Butterfly set.
- Appropriate blood sample tubes.
- Patients labels/Request forms.
- Dressing/Adhesive Tape.
- Cotton wool balls sterile.
- Pen
- Sharps bin.

Procedure
1. Wash hands, introduce yourself to the patient, explain the procedure and gain consent, document that consent was obtained.

2. Ensure patient is seated or lying down in a safe comfortable position.

3. No jewellery e.g. Watch, rings (only plain band ring), no cardigans or jackets.

4. Check the patient identification by asking the patient their name and date of birth, then check verbal information given with DR’s letters, forms and labels.

5. For inpatients they must display I.D. armband.

6. Assemble Equipment necessary.

7. Position the patient place arm in a downward position, support with pillow if needed.

8. Put on your gloves.

9. Choose a suitable site and apply tourniquet 6/7cm above (never over a joint). Tourniquet should not be left on for longer than one minute.

10. Feel, Roll, Palpate and Trace to assess appropriate vein.
11. Cleanse site using alcohol swab starting in the centre using a circular motion and then with a second wipe use one downward swipe (if using large alcowipes then one swipe downwards will suffice as per SJH policy).

12. Fix the skin with the other hand close to the chosen site and advance the needle bevel up forward at approx 20 degree angle to the skin with a steady motion. Warn the patient………….”small pinch on three”.

13. When using the sampling tubes make sure that you are using the correct tube order of draw.

14. Push tube into holder puncturing diaphragm of stopper, when blood flow is established.

15. After the first bottle starts to fill reduce the pressure of the tourniquet.

16. Fill each to the line, remove and invert gently 4-5 times gently. Do not shake.

17. When bottles are filled, remove the tourniquet completely.

18. Apply cotton wool over the needle site put do not apply pressure.

19. Remove the needle locking into needle guard or activate safety device by holding the hub both above and below using both hands pressing on both sides squeeze and draw back slowly until you hear audible click this verifies the safety mechanism has engaged and is now secure.

20. Apply pressure to site with dressing.

21. Apply pressure with cotton bud for 30 seconds over the needle site, 2-3 min if on anticoagulants. If the patient is co-operative they may be given this task. Do not ask patient to bend elbow tightly as this causes bruising.

22. Address or label blood samples at patient bedside. Put blood samples into clear plastic laboratory and send to the laboratory via the pneumatic chute or call portering service. Do not over load these bags (Maximum sample in each bag is 8-10).

23. Check needle site. If still bleeding, apply pressure for another 30 second and recheck. Do not leave patient until bleeding has stopped.

24. Once stopped apply dressing and secure.

25. Cleanse your tourniquet after each patient using large Alco-Wipe.

26. Perform hand hygiene after each patient as stated by policy on hand hygiene in the infection control manual.
Further Information

Tourniquet-
- Never use a glove or cord.
- Don’t apply over a joint or bandage
- Don’t leave on for longer than one minute
- Remove before taking out the needle
- Remember to loosen at key stages

Cannulas
- If a cannula is in situ, either use the opposite arm or a vein distal to the site.
- If a cannula is in use, the opposite arm must be used.
- If lines are running on both sides, ask a nurse on duty to stop the least important one (if possible), wait ten minutes and then take your sample. Inform the nurse when you finish. If neither can be stopped the feet may be used.
- Try, if possible, not to use veins that may be used in the future for cannulation. (i.e. straight palpable veins)

Trouble Shouting – What to do when:
- *When you can’t find a vein*- Be patient check, both arms. Only apply the tourniquet for 1min then remove and reapply after thirty seconds and keep looking. Don’t go for a vein if you don’t feel confident in getting it. Use the same techniques as for cannulation to get the vein to “rise.” Ask a supervisor for help if needed.

- *When you get no flash back*- using your free hand re-palpate the area being careful of the needle tip. Locate the vein and advance towards it with a smooth motion (Cox & Roper, 2005). Blind probing is not acceptable.

- *The vein is lateral to your position post skin puncture*- Withdraw the needle backwards without leaving the skin and advance forward in the corrected direction.

- *Your flashback disappears as the needle was advancing*- The needle has punctured the opposite side of the vein, if there is no haematoma forming withdraw the needle slowly and there will be a flashback the needle re-enters the lumen of the vein

- *A venous heamatoma is forming*- Release the tourniquet and remove the needle as in normal steps, apply the cotton wool with a lot of pressure, holding for two-three minutes. If large use an ice pack

- *You hit an artery*- a haematoma will form. Treat as before except apply as much pressure as possible and ask for help.

Special Considerations

Oedematous arm- blood should be taken from a non-oedematous arm if possible. If taking blood from a limb with oedema, it’s essential to discard the first bottle.

When taking blood from someone with a prior mastectomy-
- If unilateral, use the contra-lateral arm
- If bilateral, ask for a more senior person. They will take blood from the most distal point.
Coag screen bottles must be filled completely to the mark otherwise they will be refused by the lab. If it’s the first bottle in the order, the line must be primed first i.e. a red tube or another light blue must be used to remove the air from the line.

Calcium blood levels must be taken without a tourniquet or tourniquet must removed for two to three minutes after the needle is introduced and then sample is taken.

Tropinins must be sent to the lab immediately.

Samples for Vitamin D must be shielded immediately from light. Use tin foil to wrap bottle

With Special Thanks to the Phlebotomy Department at SJH.