



Appendix B: Therapeutic Phlebotomy Using an 18 Gauge Cannula

The standard equipment provided for phlebotomy is a blood collection unit with a 15 gauge stainless steel needle attached to the unit. The large inflexible needle makes venipuncture difficult if the patient has poor or limited venous access.

The equipment and procedure used here are effective and yet:

- provide more choice of venous access
- patients report the procedure is more comfortable as the cannula is smaller and softer
- patients and nurses report less bleeding post cannula removal.

Equipment

1. 18 ga x 11/4 inch teflon coated IV catheter
2. extension set, luer lock adapters, 38 cm
3. injection cap, 7/8 inch, male luer lock
4. single blood pack unit without anticoagulant
5. BP cuff
6. alcohol swabs
7. sterile 2 x 2 inch gauze
8. tape
9. clamps x 2
10. weigh scale
11. stretcher with adjustable height
12. clean gloves

Procedure

A. Prepare patient

1. provide explanation
2. lay patient down
3. baseline BP and pulse
4. apply heat to arms prn
5. provide a handgrip prn
6. sedation as ordered

B. Prepare equipment

1. open extension set, close clamp
2. attach injection cap to female end of extension unit
3. clean injection cap with alcohol swab
4. insert needle of blood collection unit into injection cap

C. Perform venipuncture

1. BP cuff to 90 mm Hg, clamp to prevent leakage
2. select and clean site
3. glove
4. perform venipuncture, advance cannula to hub
5. attach male adapter to IV device
6. release pressure
7. secure cannula: tape extension set to arm; gauze over venipuncture site

D. Perform phlebotomy

1. open clamp on extension set
2. apply pressure by pumping BP cuff to 60 mm Hg
3. lower collection unit to scale to measure volume
4. adjust flow by the height of bed and pressure of cuff
5. on completion, release BP cuff, clamp extension set, and remove IV device
6. apply pressure, dress site
7. monitor patient and discharge per protocol