

# Peripheral access for successful apheresis:

TIPS AND TRICKS

# PREPARATION/ASSESSMENT

- Encourage hydration in the days prior to collection day!
  - Even better: avoid alcohol and caffeine.
- Warm arms for five-plus minutes prior to placing the needle in the arm.
  - Use a warming pad around the arm.
  - Use heat pack or heated saline bags in the hands.
- Use gravity.
  - Assess (and access) arms laid straight and horizonal or lower.
- Relax muscles.
  - Deeper veins are easiest to feel when muscles are soft and relaxed.
  - Nervous donors are often tense, flexing or clenching their fists.
- Consider using a manual BP cuff, briefly inflated to 60-80mmHg, during assessment.
  - Cuffs and tourniquets work particularly well in conjunction with periodic squeezing of a ball or fist.

### **ACCESS**

- · Common for return access:
  - Use 18 gauge IV.
  - Place in forearm (or distal) veins when possible to maximize donor flexibility and comfort during procedure.
- · Common for inlet access:
  - Use 17-18g steel apheresis needle.
  - Place in antecubital veins (median cubital, cephalic, basilic).
- Securing and positioning the arm used for inlet is particularly important.
  - Consider using an arm splint and pillows to keep the arm straight and as comfortable as possible during collection.
  - Using a secured splint can preserve access while donors use a urinal/commode.
- If an IV catheter or needle is in the vein but there's resistance to fully advancing, don't force it. It may run just fine as-is.



# COLLECTION

### Inlet alarms:

- If your SOP allows, connect an empty syringe to the inlet needle line and pulsatile *pull*. You may feel clots enter the syringe. Then, with BP cuff deflated, pulsatile *flush* the inlet needle line with saline.
  Reconnect and resume.
- If your SOP allows, connect a saline flush to a hub on the inlet line and, while disconnected from the inlet needle, flush saline into a biohazard container. Reconnect and resume, addressing clotting if detected.
- Pause collection, inflate BP cuff to 40-60mmHg and, with gentle palpation, reassess and adjust needle positioning. Back the needle out slightly and re-advance as needed.
- Very gently, use ultrasound to assess needle position without collapsing the vein. Adjust and re-secure the needle as indicated.

### • Return alarms:

- Assess for clumping and clotting. Adjust anticoagulation settings if deemed a likely culprit.
- Ensure donor's arm is straight, in anatomical position—but sometimes unlikely positions do the trick!
- Visualize the entire return line and assess for kinking.
- Remove IV dressing (temporarily) and carefully back the IV catheter out slightly.
- Try gentle manipulation of the insertion site—slight downward pressure on the hub, slight traction on the line. Secure lines as indicated to improve flow.

# **HELPFUL EQUIPMENT**

- · Manual BP cuff
- · Arm splint
- · Heat pad/heat packs
- Pillows
- · Squeeze ball
- Vein finder
- Ultrasound

