Special Specimen Collection Procedure for Coagulation Testing

The accuracy of hemostasis testing depends upon the quality of the specimen submitted. To ensure the best possible results, follow the collection requirements as closely as possible.

Collection of Blood Specimens from Indwelling Catheters

When specimens are collected from indwelling catheters, in order to prevent possible heparin contamination or specimen dilution, the line should be flushed with 5 mL of saline. The first 5 mL of blood or 6-times the line volume (dead space volume) of the catheter must be discarded before the coagulation tube is filled.

Collection of Citrated Plasma for Coagulation Testing

1. Draw a plain red-top tube to remove tissue fluid contamination. Discard this tube. (Alternatively, this tube may be used for serum-type laboratory tests.)
2. Draw blood into a 3.2% buffered sodium citrate collection tube (light blue top) filled to the proper level.
   If the patient's hematocrit is >55%, the volume of anticoagulant in the tube should be adjusted. Use the following formula to determine the correct anticoagulant volume:
   Anticoagulant volume: (100-Hct) x blood draw volume required in blood collection tube/(595-Hct) = volume of anticoagulant to be used.
3. Invert gently 6 times to mix. Process immediately.
4. Centrifuge for 15 min at 2500 x g.
5. Repeat centrifugation at 2500 x g for 15 minutes to assure complete platelet removal.
6. Remove plasma using a plastic transfer pipette and dispense the plasma into 1 or more screw-capped plastic vials. Label tubes appropriately.
7. Freeze immediately at -20°C.
8. Specimen must remain frozen at all times. Ship within 24 hours on dry ice.