Edward-Elmhurst HEALTH | Healthy Driven

To acquire a plasma specimen that is platelet poor for special coagulation testing.

SPECIMEN:

Acceptable Specimen:
NCCLS guidelines H3-A5 and H21-A4 (Section 4) are used for collection of all specimens for coagulation testing.

3.2% sodium citrate is the only acceptable anticoagulant for testing. Acceptable specimen should have a proportion of blood to sodium citrate volume of 9:1. As per CLSI guidelines, tubes should be filled to +/- 10% of the stated draw volume of the tube.

A properly filled glass 2.7 mL BD (Ref#: 363083), 3.2% sodium citrate tubes should have a total volume of at least 2.4 mL and not exceed 3.0 mL.

A properly filled plastic 1.8 mL BD (Ref#: 363080), 3.2% sodium citrate tube should have a total volume of at least 1.6 mL and not exceed 2.0 mL.

Specimens for special coagulation testing whether if testing is done in-house or sent to a reference lab should be processed (plasma removed from cells) within one hour of collection and frozen.

Centrifugation:
All specimens collected for coagulation testing are centrifuged at the speed and time that has been determined to consistently produce platelet poor plasma (platelet count $<10 \times 10^9$/L).

The optimal centrifugation time, when using the Statspin Express, has been determined to be 2 consecutive 2 minute spins, for a total spin time of 4 minutes. Validation for the ability to produce platelet poor plasma occurs annually.

The optimal centrifugation time, when using the Statspin 4, has been determined to be one 5 minute spin. Validation of the ability to produce platelet poor plasma occurs annually.

***Unacceptable Specimens*:**
Specimens that are clotted, hemolyzed or collected in the wrong anticoagulant are not suitable for testing and are rejected.

Specimens that are underfilled or overfilled are also not suitable for testing and are rejected. Specimens should be compared to the reference tubes available in the department to determine proper fill volume.

PROCEDURE:

1. Centrifuge the specimen for a total spin time of 4 minutes. Remove plasma from tube and transfer to another properly labeled tube. Leave a small layer of plasma above buffy coat. This will prevent contamination of the plasma with platelets.
2. Centrifuge plasma a second time for a total spin time of 4 minutes.
3. Remove plasma from tube and transfer to another properly labeled tube. Leave a small layer of plasma above buffy coat.
4. Label two tubes with patient's name and accession number. Add at least 1 mL of platelet poor plasma to each tube. Write the platelet count on each tube.
5. Freeze the tubes in the –70 °C freezer in appropriate specimen rack.