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Laboratory Services - (570)522-2510

ESR - Erythrocyte Sedimentation Rate

Test Code: ESR

Specimen Type: Whole Blood

Tube Type / Collection Container: Streck esr vacuum tube (Glass)

Specimen Volume: 1.2 mL

Specimen Handling: Do Not affix any labels to the clear area of the glass tube. All labels should be placed high in the frosted area on the tube. Please do not wrap long labels around the tube which will extend into the clear glass area.

Specimen Storage: Stability: 4 hrs Room Temperature; 72 hrs Refrigerated.

Specimen Collection Notes: Please See Collection Procedure Below

Department: Hematology



Evangelical Community Hospital Laboratory
Department of Hematology
Erythrocyte Sedimentation Rate Collection Procedure

The collection and preparation of the Erythrocyte Sedimentation Rate (ESR) sample is of great importance for accurate results. Inaccurate results are most often due to improper sample handling. To avoid such problems, the following collection procedure must be followed:

The ESR- Vacuum tubes are similar to ordinary vacuum blood collection tubes. The tube contains liquid anticoagulant (citrate) and must be thoroughly mixed with the blood sample immediately after the tube has filled. Failure to mix the sample completely and immediately may result in the formation of microscopic blood clots/aggregates that could alter results.

Fig. 5



1. Follow the NCCLS Approved Standard for disinfection and venipuncture using a disposable blood collection system.
2. Insert the ESR-Vacuum tube into the plastic holder and push it toward the front wall, puncturing the stopper.
3. When the blood flow starts, angle the tube so the blood stream hits the glass wall before mixing with the anticoagulant (citrate). This will minimize the formation of foam.
4. The vacuum will automatically draw the appropriate amount of blood (1.2ml) into the tube. The correct fill level is also printed on the label.(Fig. 5).

Fig. 6



5. Mix the tube immediately after drawing the sample by inverting it 6 to 8 times. The air bubble in the tube must reach the opposite end between every inversion. Hold the tube at a 35° angle to facilitate the mixing process. (Fig. 6)

IMPORTANT

The mixing procedure is very important! If the citrate is not properly mixed with the blood, clots/aggregates may form and cause falsely elevated results.

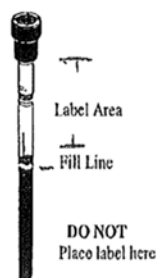


Fig. 7

6. Label the specimen with the patient's name, date of birth, and date and time of collection:

If hand labeling – DO NOT write over the fill line.

If using pre-printed labels- Apply label as close to the cap as possible. Leave a 3mm space between the bottom of the label and the fill line. **DO NOT place labels on or below the fill line**

7. Specimens are to be sent to the laboratory as soon as possible. Specimens should be stored at 2-8°C and tested within 72hrs.