

Tourniquet Time

Factors and Their Possible Consequences:

If a tourniquet is applied for a prolonged time, hemoconcentration can result.

Osmotic pressure can affect RBCs, leading to rupture of the cells.

Corrective Actions:

- Tourniquet should be released as soon as blood flow is established in the first tube, if possible.
- Tourniquet should be released no later than one minute after initial placement.

References:

1. *Collection of Diagnostic Venous Blood Specimens*. 7th ed. CLSI Standard GP41. Wayne, PA: Clinical and Laboratory Standards Institute; 2017.
2. Hemolysis in serum samples drawn by emergency department personnel versus laboratory phlebotomists. Burns ER, Yoshikawa N. *Lab Med* 2002;33:378-380.
3. Proper patient preparation, specimen collection, and sample handling are critical to quality care. Kurec A. *Med Lab Obs*, 2016.