THE EFFECT OF DURATION OF TOURNIQUETS APPLICATION ON BLOOD VENOUS TAKING TO ACTIVATED PARTIAL TROMBOPLASTIN TIME TEST (APTT)

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ABSTRACT

Tourniquet is a vein puncture that is used to simplify the process of flebotomy. However, negligence in the use of tourniquets can interfere with patient comfort and laboratory results. Pressure on prolonged tourniquets on the patient's arm causes some analytes to get out of the tissue and into the blood. Analyzes of proteins (including enzymes), lactate, increased calcium and phosphate, and tissue release of thromboplastin The release of tissue thromboplastin into the bloodstream due to prolonged stirring, is thought to affect the aPTT period leading to a shortening of aPTT where, aPTT (activated partial thromboplastin time) is an examination that describes coagulation abnormalities and hemostasis sequences to measure intrinsic path activation. The purpose of this study was to determine the effect of the duration of the installation of tourniquets on the blood venous taking of the aPTT examination. This type of research is analytic. Samples were taken randomly as many as 16 students from the total population of 50 students 8th semester 8th grade C DIV Health Analyst University of Muhammadiyah Semarang, samples examined with the old treatment of tourniquet installation that is 60 seconds and 90 seconds. The result of the examination shows the average of aPTT value at 60 seconds tourniquets installation is 35,08 second and mean of aPTT value at 90 seconds tourniquets installation is 32,21 second. Thus, the aPTT value in the 60 seconds tourniquets installation is greater than the aPTT value at 90 second tourniquet installs. Tests paired T-test shows true value 0,00 then there is influence duration of installation of tourniket on venous blood taking to examination period of partial thromboplastin activation (aPTT).

Keywords: duration of tourniquets application, activated partial tromboplastin time (aptt)