THE DIFFERENCE OF ALANINE AMINOTRANSFERASE (ALT) LEVEL IN
SAMPLE OF SERUM AND EDTA PLASMA

Endang Sri Lestari¹, Andri Sukeksi², Fitri Nuroini²

1. Study Program D IV Health Analyst Faculty of Nursing and Health University of Muhammadiyah Semarang.
2. Clinical Pathology Laboratory Faculty of Nursing and Health Sciences University of Muhammadiyah Semarang.

ABSTRACT

ALT measurement is done with serum, but it could also use the EDTA plasma. The problem which occurred is serum volume is not sufficient or simultaneous with another examinations which are using plasma, so that the examination is done using EDTA plasma. Plasma contains fibrinogen and anticoagulant, so that it can affect the examination result. The purpose of this research was to determine the difference of ALT level in sample of serum and EDTA plasma. The research type was analytic with cross sectional approach. Research sample as much as 32 sample units, with 16 serum materials, and 16 EDTA plasma, the examination of ALT level was done. The research result obtained was ALT level in serum samples were between 9 - 25 mg/dL, mean 16.88 mg/dL and standard deviation 4.24 mg/dL. ALT level in plasma samples were between 14 - 33 mg/dL, mean 22.81 mg/dL and standard deviation 5.36 mg/dL. Statistical test with Paired t Test concluded that there was significant difference of ALT level in serum sample and ALT level in plasma sample (p = 0.000).

Keywords: ALT, serum, EDTA plasma