Na, K, Cl Concentration in Time Interval Examination Variations of Serum

Abstrak:
The role of electrolytes in the human body is very important. Almost all metabolic processes are affected by electrolytes. The accuracy of examination results depend on the management in pre-analytical, analytical, and post-analytical processes. The management of specimen is one of the essential factors in pre-analytical process that may influence the accuracy of laboratory results. This study has purposed to observe the influence of time-interval variation at the examination of Na, K, and Cl serum concentration. A cross-sectional study was conducted on 30 outpatient's serum samples who visited the Clinical Pathology Laboratory of Dr. Wahidin Sudirohusodo hospital in Makassar during July to August 2007. The Na, K, and Cl serum samples were examined immediately, 1 hour-delayed, and 2 hours-delayed. Data were analyzed using paired T test in SPSS version 11.5. In this study we found that there was no significant difference for Na and Cl between immediate and delayed samples, similarly showed for K between immediate and 1 hour-delayed (p > 0.05). A significant different for K between immediate and 2 hours delayed, and between the first hour and the second hour delayed samples (p < 0.05). From this study we could conclude that delayed samples more than 2 hours had no influence for Na and Cl examination result. Delayed samples more than 2 hours for K had influence for the examination result.

Keyword:
Na, K, Cl examination, time interval variations