

Perbedaan Kadar Elektrolit Darah (Na, K, Cl) pada Sampel Segera dan Ditunda 150 Menit

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Abstrak

Elektrolit berperan penting dalam tubuh manusia yang dapat mempengaruhi metabolisme. Pemeriksaan elektrolit yang sering diminta oleh para klinisi untuk menilai keseimbangan kadar elektrolit dalam tubuh yaitu pemeriksaan Natrium (Na), Kalium (K), Clorid (Cl). Pemeriksaan elektrolit darah menggunakan serum sebagai spesimen. Spesimen serum jika ditunda 150 menit setelah pengambilan sampel akan mengalami perkembangan bakteri dan terjadi pengerutan sel darah merah sehingga serum terperas keluar pada proses ini akan mengubah kadar elektrolit darah. Tujuan penelitian untuk mengetahui perbedaan kadar elektrolit darah (Na, K, Cl) pada sampel segera dan ditunda 150 menit. Jenis penelitian adalah penelitian analitik dengan desain penelitian eksperimen yaitu dengan melakukan perlakuan terlebih dahulu sebagai kontrol sehingga dapat menguji perubahan yang terjadi setelah perlakuan penundaan 150 menit. Sampel pada penelitian menggunakan serum dan data yang digunakan berupa pemeriksaan langsung kadar elektrolit darah. Data yang terkumpul akan dilakukan uji normalitas dengan uji kolmogorov smirnov, kemudian dianalisa dengan menggunakan uji paried sampel t tes. Hasil penelitian menunjukkan bahwa kadar elektrolit darah Na menggunakan sampel segera nilai rata-rata 104,67 Meq/L, sedangkan sampel ditunda 150 menit nilai rata-rata 111,11 Meq/L. Kadar elektrolit darah K segera nilai rata-rata 4,611 Meq/L, sedangkan sampel ditunda 150 menit nilai rata-rata 3,033 Meq/L. Kadar elektrolit darah Cl segera nilai rata-rata 91,89 Meq/L, sedangkan sampel ditunda 150 menit nilai rata-rata 93,44 Meq/L. Kesimpulannya yaitu tidak ada perbedaan kadar elektrolit darah Natrium pada sampel segera dan ditunda 150 menit, dan ada perbedaan kadar elektrolit darah Kalium dan Klorida pada sampel segera dan ditunda 150 menit.

Kata Kunci: Natrium, Kalium, Klorida

Differences in Blood Electrolyte Levels (Na, K, Cl) in Samples Immediately and Delayed 150 Minutes

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ABSTRACT

Electrolytes acts in the human body which can affect metabolism. Electrolyte examinations are often requested by clinicians to assess the balance of electrolyte levels in the body, namely examination of Sodium (Na), Potassium (K), Clorid (Cl). Examination of blood electrolytes using serum as a specimen. Serum specimens if delayed 150 minutes after sampling will be bacterial development and red blood cell shrinkage occurs so the serum is squeezed out in this process will change blood electrolyte levels. This study aims to determine differences in blood electrolyte levels (Na, K, Cl) in the sample immediately and delayed 150 minutes. This type of research is analytic research with experimental research design by doing the treatment first as a control so it can test changes that occur after a 150 minute delay treatment. The sample in this study uses serum and the data used is a direct examination of blood electrolyte levels. The collected data will be tested for normality with the Kolmogorov Smirnov test, then analyzed using the paried sample t test. The results showed Na blood electrolyte levels using the sample immediately the average value is 104.67 Meq/L, while the sample delayed 150 minutes the average value was 111.11 Meq/L. K blood electrolyte levels immediately averaged was 4.611 Meq/L, while samples were delayed 150 minutes with an average value was 3.033 Meq/L. Cl immediate blood electrolyte levels were an average value was 91.89 Meq/L, while the sample was delayed by 150 minutes with an average value was 93.44 Meq/L. The conclusion is there was no difference in Sodium blood electrolyte levels in the sample immediately and delayed 150 minutes, and there were differences in the levels of potassium and chloride blood electrolytes in the sample immediately and delayed 150 minutes.

Keywords: Sodium, Potassium, Clorid