

ABSTRAK

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AKURASI METODE JAFFE TERHADAP METODE ENZIMATIK DAN
PRESISI METODE JAFFE PADA PEMERIKSAAN KADAR KREATININ
NORMAL DAN ABNORMAL TINGGI

1x + 99 Halaman + 10 Tabel + 21 Lampiran

Pemeriksaan kreatinin banyak dilakukan menggunakan dua metode yaitu metode Jaffe dan Metode Enzimatik. Metode Jaffe adalah metode pemeriksaan untuk mengetahui nilai kreatinin dengan mereaksikan menggunakan asam pikrat yang sering dilakukan di laboratorium pratama dengan menggunakan semi otomatis. Metode Enzimatik dianggap sebagai metode yang referens banyak dilakukan lab pratama dan rumah sakit. Penelitian ini bertujuan mengetahui akurasi dan presisi kadar kreatinin metode Jaffe terhadap metode enzimatik.

Jenis penelitian ini adalah Observasional analitik. Penelitian dilakukan di RSUD Haji Provinsi Jawa Timur dan Laboratorium Bakti Analisa dengan jumlah kelompok normal diambil pasien rawat jalan sebanyak 30 bahan uji serum dan kelompok abnormal tinggi diambil pasien pre HD sebanyak 25 bahan uji serum yang diambil secara *selective* sampling. Metode Jaffe dilakukan akurasi dengan membandingkan hasil pemeriksaan dengan metode Enzimatik dan pengukuran presisi dilakukan sebanyak 10 kali pada masing-masing bahan uji.

Nilai inakurasi pemeriksaan kreatinin normal metode Jaffe terhadap metode Enzimatik adalah 19,20% sedangkan nilai inakurasi pemeriksaan kreatinin abnormal tinggi adalah -9,33%. Presisi pemeriksaan kreatinin normal metode Jaffe dengan nilai koefisien variasi adalah 5.86% sedangkan pemeriksaan kreatinin abnormal tinggi dengan nilai koefisien variasi adalah 1.13%.. Kesimpulan dari penelitian ini metode jaffe pemeriksaan kreatinin normal memiliki nilai akurasi yang kurang baik karena memiliki nilai inakurasi lebih tinggi dari batas $\pm 10\%$, sedangkan pada pemeriksaan kreatinin abnormal tinggi memiliki nilai akurasi yang baik karena masih dalam rentang inakurasi $\pm 10\%$. Kadar kreatinin normal dan abnormal tinggi metode Jaffe memiliki nilai presisi yang baik karena memiliki nilai impresisi lebih rendah dari batas CV maksimum yaitu 6%.

Kata Kunci : akurasi, presisi, kreatinin, metode jaffe, metode enzimatik

ABSTRACT

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ACCURACY OF JAFFE METHOD AGAINST ENZYMATIC METHOD AND
PRECISION OF JAFFE METHOD IN THE EXAMINATION OF NORMAL AND
ABNORMALLY HIGH CREATININE LEVELS

1x + 101 Page + 10 Table + 21 Appendices

Creatinine examination is widely done using two methods, namely the Jaffe method and the Enzymatic Method. Jaffe method is an examination method to determine the value of creatinine by reacting using picric acid which is often done in private laboratories using semi-automatic. Enzymatic method is considered as a method that is referenced by many private laboratories and hospitals. This study aims to determine the accuracy and precision of creatinine levels of the Jaffe method against enzymatic methods.

This type of research is analytic observational. The study was conducted at the East Java Province Haji Hospital and Bakti Analysis Laboratory with the number of normal groups taken outpatients as many as 30 serum test materials and high abnormal groups taken pre HD patients as many as 25 serum test materials taken by selective sampling. The Jaffe method was carried out for accuracy by comparing the results of the examination with the Enzymatic method and precision measurements were carried out 10 times on each test material.

The inaccuracy value of normal creatinine examination of Jaffe method against Enzymatic method is 19.20% while the inaccuracy value of high abnormal creatinine examination is -9.33%. Precision of normal creatinine examination of Jaffe method with coefficient of variation value is 5.86% while high abnormal creatinine examination with coefficient of variation value is 1.13%. The conclusion of this study is that the Jaffe method of normal creatinine examination has a poor accuracy value because it has an inaccuracy value higher than the $\pm 10\%$ limit, while the high abnormal creatinine examination has a good accuracy value because it is still within the $\pm 10\%$ inaccuracy range. Normal and abnormally high creatinine levels Jaffe method has a good precision value because it has an imprecision value lower than the maximum CV limit of 6%.

Keywords: accuracy, precision, creatinine, jaffe method, enzymatic method.