

ABSTRAK

Latar Belakang: Obat Anti Tuberkulosis (OAT) adalah obat untuk penyakit tuberkulosis. Penggunaan obat OAT jenis pirazinamid memiliki efek samping berat menyebabkan gagal ginjal. Salah satu parameter pemeriksaan fungsi ginjal adalah kreatinin dengan metode *Jaffe*. Bahan pemeriksaan ini adalah serum pasien tuberkulosis, dimana serum tidak boleh lipemik karena dapat mengganggu pembacaan hasil pada alat spektrofotometri. Menurut Hukum Lambert larutan keruh karena kenaikan konsentrasi menyebabkan penyimpangan pada kurva. Salah satu penanganan serum pekat adalah dengan perlakuan pengenceran. Pengenceran dilakukan dengan penambahan NaCl fisiologis perbandingan 1:1 dengan harapan dapat menurunkan tingkat kekeruhan dan memperkecil tingkat kesalahan selama pengukuran sampel

Tujuan Penelitian: Mengetahui adanya perbedaan kadar kreatinin pada serum pasien tuberkulosis dengan dan tanpa pengenceran.

Metode Penelitian: Jenis Penelitian adalah *Pre Experimental Design (non design)*. dengan desain penelitian *One-Group Pretest-Posttest design*. Sampel yang digunakan sebanyak 30 serum.. Data yang diperoleh kemudian dianalisis secara deskriptif, dan uji *Wilcoxon* jika karena data tidak berdistribusi normal.

Hasil Penelitian: Hasil penelitian menunjukkan bahwa rata-rata hasil pemeriksaan serum pasien tuberkulosis dengan dan tanpa pengenceran yaitu 1,14 mg/dL dan 1,87 mg/dL dengan selisih kadar 0,73 mg/dl atau sebesar 39%. Hasil ini dianalisis secara deskriptif menunjukkan penurunan rata-rata kadar kreatinin dengan pengenceran Hasil uji *Wilcoxon* menunjukkan $p(0,000) < 0,05$.

Kesimpulan: Ada perbedaan kadar kreatinin pada serum pasien tuberkulosis dengan dan tanpa pengenceran.

Kata Kunci: Kadar kreatinin, serum pasien tuberkulosis, pengenceran

ABSTRACT

Background: Anti Tuberculosis Drugs are drugs for tuberculosis. The use of pyrazinamide type OAT drugs has severe side effects causing kidney failure. One of the parameters for examining kidney function is creatinine using the *Jaffe method*. The material for this examination is the serum of tuberculosis patients, where the serum should not be lipemic because it can interfere with the reading of the results on the spectrophotometric device. According to Lambert's Law, a cloudy solution due to an increase in concentration causes a deviation in the curve. One of the handling of concentrated serum is by dilution treatment. Dilution was carried out with the addition of physiological NaCl at a ratio of 1:1 in the hope of reducing the level of turbidity and reducing the error rate during sample measurement.

Objectives: To determine the difference in creatinine levels in the serum of tuberculosis patients with and without dilution.

Research Methods: The type of research is *Pre Experimental Design (non design)*, with the research design of *One-Group Pretest-Posttest design*. The samples used were 30 serum. The data obtained were then analyzed descriptively, and the *Wilcoxon* if the data were not normally distributed.

Research Results: The results showed that the average results of serum examinations of tuberculosis patients with and without dilution were 1.14 mg/dL and 1.87 mg/dL with a difference in levels of 0.73 mg/dl or 39%. These results were analyzed descriptively showing a decrease in the average level of creatinine with dilution *Wilcoxon* showed $p (0.000) < 0.05$.

Conclusion: There are differences in creatinine levels in the serum of tuberculosis patients with and without dilution.

Keywords: Creatinine level, serum of tuberculosis patients, dilution