

# **PERBEDAAN HASIL PEMERIKSAAN ALBUMIN PADA SERUM YANG SEGERA DIPISAH DAN TIDAK SEGERA DIPISAH DARI BEKUAN DARAH**

**(DIFFERENCES IN ALBUMIN TEST RESULTS IN SERUM THAT IS IMMEDIATELY SEPARATED AND NOT IMMEDIATELY SEPARATED FROM BLOOD CLOTS)**

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## **INTISARI**

Albumin adalah protein terbanyak dalam serum. Pemeriksaan albumin terkadang tidak segera dikerjakan, sehingga mengalami penundaan dalam pengolahan sampel. Sampel yang telah diperoleh harus segera dipisahkan dari bekuan darah maksimal 2 jam setelah sampel diperoleh. Apabila sampel tidak segera dipisahkan dari bekuan darah maka sampel akan mengalami hemokonsentrasi sehingga hasil pemeriksaan albumin memberikan hasil meningkat palsu. Tujuan penelitian ini untuk mengetahui perbedaan hasil pemeriksaan albumin pada serum yang segera dipisah dan tidak segera dipisah dari bekuan darah dengan penundaan selama 2 jam dan 6 jam.

Penelitian ini menggunakan pendekatan *cross sectional* pengambilan sampel secara *purposive sampling* sehingga diperoleh sampel sebanyak 33 sampel. Penelitian dilakukan di Laboratorium Rumah Sakit UNS Surakarta pada April 2019. Kadar albumin diukur menggunakan metode *bromocresol green* alat spektrofotometer I-Lab Taurus. Data analisis menunjukkan data terdistribusi normal dengan nilai  $p > 0,05$  kemudian data di uji menggunakan uji *paired sample t-test* dengan nilai  $p < 0,05$  dan interval kepercayaan 95%.

Hasil penelitian ini menunjukkan data kadar albumin tidak terdapat perbedaan yang bermakna antara serum segera dipisah dengan penundaan pemisahan serum selama 2 jam ( $p=0,296$ ), serum segera dipisah dengan penundaan pemisahan serum selama 6 jam ( $p=0,187$ ), penundaan pemisahan serum selama 2 jam dengan penundaan pemisahan selama 6 jam ( $p=0,085$ ).

**Kata Kunci:** Kadar Albumin, Serum Segera Dipisah, Penundaan 2 Jam dan 6 Jam.

## **ABSTRACT**

Albumin is the most abundant protein in serum. Albumin test is sometimes not done immediately, so that there is a delay in sample processing. Samples that have been obtained must be immediately separated from the blood clot within 2 hours after the sample is obtained. If the sample is not immediately separated from the blood clot, the sample will experience hemoconcentration so that the results of the albumin examination give rise to false results. The objective of this research is to determine differences in albumin test

results in serum that is immediately separated and not immediately separated from blood clots with a delay of 2 hours and 6 hours.

This research used a cross sectional approach. The sampling was done by purposive sampling in order to obtain 33 samples. This research was conducted at the UNS Hospital Laboratory Surakarta in April 2019. Albumin levels were measured using the bromocresol green method of the I-Lab Taurus spectrophotometer. The data analysis showed that the data were normally distributed with a value of  $p > 0.05$  the data were tested using paired sample t-test with a value of  $p < 0.05$  and a confidence interval of 95%.

The results of this research indicate that there were no significant differences between the serum that is immediately separated with delay of serum separation for 2 hours ( $p=0.296$ ), the serum that is immediately separated with a delay of serum separation for 6 hours ( $p=0.187$ ), the delay in serum separation for 2 hours with a separation delay for 6 hours ( $p=0.085$ ).

**Keywords:** Albumin levels, serum immediately separated, 2 hours and 6 hours delay.

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