

ABSTRAK

Latar Belakang: Hemolisis merupakan salah satu kesalahan pra analitik yang paling sering ditemukan. Hemolisis ditandai dengan adanya warna merah muda pada serum atau plasma. Serum hemolisis mengandung hemoglobin yang dapat mempengaruhi hasil pemeriksaan kimia darah, salah satunya yaitu kadar trigliserida.

Tujuan Penelitian: Untuk mengetahui pengaruh kadar hemoglobin dalam serum terhadap hasil pemeriksaan kadar trigliserida dan mengetahui batas minimal kadar hemoglobin dalam serum yang mempengaruhi hasil pemeriksaan kadar trigliserida.

Metode Penelitian: Penelitian ini merupakan eksperimen semu dengan menggunakan desain penelitian *post test only with control group design*. Sampel yang digunakan adalah serum yang dibagi menjadi 6 kelompok. Setiap kelompok dibuat sebanyak 500 µl campuran yang masing-masing ditambah hemolisat sebanyak 0 µl; 6 µl; 10 µl; 19 µl; 31 µl dan 48 µl sehingga kadar hemoglobin dalam kelompok campuran masing-masing menjadi 0 mg/dL; 57,6 mg/dL; 96 mg/dL; 182,4 mg/dL; 297,6 mg/dL dan 460,8 mg/dL. Data kadar trigliserida yang diperoleh kemudian dianalisis menggunakan SPSS 16.0 for windows.

Hasil Penelitian: Hasil penelitian ini menunjukkan adanya perbedaan rerata hasil pemeriksaan kadar trigliserida. Analisis statistik menunjukkan $p (0,000) < 0,05$ yang artinya ada perbedaan kadar trigliserida yang mengandung 0 mg/dL; 57,6 mg/dL; 96 mg/dL; 182,4 mg/dL; 297,6 mg/dL dan 460,8 mg/dL terhadap hasil pemeriksaan kadar trigliserida secara berurutan yaitu 143,6 mg/dL; 140 mg/dL; 137,2 mg/dL; 132,6 mg/dL; 128,6 mg/dL dan 125,2 mg/dL. Kadar hemoglobin dalam serum sebesar 182,4 mg/dL sudah mempengaruhi hasil pemeriksaan kadar trigliserida.

Kesimpulan: Ada pengaruh kadar hemoglobin dalam serum terhadap hasil pemeriksaan kadar trigliserida. Kadar hemoglobin dalam serum sebesar 182,4 mg/dL sudah mampu mempengaruhi hasil pemeriksaan kadar trigliserida.

Kata Kunci: hemolisis, kadar hemoglobin, kadar trigliserida

ABSTRACT

Background: Hemolysis is one of the most common pre-analytic errors. Hemolysis is characterized by the presence of pink in serum or plasma. Serum hemolysis contains hemoglobin which can affect the results of blood chemistry tests, one of which is triglyceride levels.

Research Objective: To determine the effect of hemoglobin levels in serum on the results of examinations of triglyceride levels and determine the minimum hemoglobin levels in serum that affect the results of the examination of triglyceride levels.

Research Method: This research was a quasi experiment using a post-test research design only with control group design. The sample that used was serum divided into 6 groups. Each group was made as much as 500 µl mixture, each of which was added as much as 0 µl hemolysate; 6 µl; 10 µl; 19 µl; 31 µl and 48 µl so that the hemoglobin level in the mixed group becomes 0 mg/dL, respectively; 57,6 mg/dL; 96 mg/dL; 182,4 mg/dL; 297,6 mg/dL and 460,8 mg/dL. Triglyceride level data obtained were then analyzed using SPSS 16.0 for windows.

Results: The results of this research indicate that there are differences in the average results of the examination of triglyceride levels. Statistical analysis showed $p (0,000) <0.05$ which means that there are differences in triglyceride levels containing 0 mg/dL; 57,6 mg/dL; 96 mg/dL; 182,4 mg/dL; 297,6 mg/dL and 460,8 mg/dL on the results of sequential triglyceride levels, namely 143,6 mg/dL; 140 mg/dL; 137,2 mg/dL; 132,6 mg/dL; 128,6 mg/dL and 125,2 mg/dL. Hemoglobin levels in serum starting at 182,4 mg/dL have influenced the results of examination of triglyceride levels.

Conclusion: There was an influence of serum hemoglobin levels on the results of the examination of triglyceride levels. The serum hemoglobin level of 182,4 mg/dL have influenced the results of the examination of triglyceride levels.

Keywords: hemolysis, hemoglobin levels, triglyceride level