

ABSTRACT

Background: Cholesterol is a fat component that is white and shaped like wax. Cholesterol has a very important role in maintaining health. Cholesterol examination is greatly influenced by food, so it is recommended to fast because by fasting the cholesterol concentration is in its actual state. An increase in cholesterol levels increases the risk of high blood pressure, the higher the cholesterol level, the higher the possibility of hypertension. This needs to be investigated whether there are differences in cholesterol levels in serum samples from hypertensive patients who were examined without fasting and fasting for 12 hours.

Research objective: To determine the difference in cholesterol levels in serum samples from hypertensive patients who were examined not fasting and fasting for 12 hours.

Research method: This research is a pre-experimental research with a static group comparison research design.

Results: The average cholesterol level in serum samples from hypertensive patients who were examined not fasting was 183.625 mg/dl and those who were examined fasting for 12 hours was 171.825 mg/dl. The statistical test results show the Sig value. (2-tailed) is 0.133 which is greater than 0.05. The percentage difference in mean difference in cholesterol levels is 6.42% and does not exceed $\pm 10\%$, the lower percentage is 2.137% and does not exceed $\pm 10\%$, while the upper percentage is 15.871%, which exceeds the limit of $\pm 10\%$, this value exceeds the clinical tolerance limit permitted by the Clinical Laboratory Improvement Amendments (CLIA).

Conclusion: Cholesterol levels in serum samples from hypertensive patients who were examined non-fasting and 12-hour fasting showed significant differences.

Keywords: Hypertension, cholesterol, fasting, non-fasting.

ABSTRAK

Latar belakang : Kolesterol merupakan komponen lemak yang berwarna putih dan berbentuk seperti lilin. Kolesterol mempunyai peranan utama yang sangat penting untuk mempertahankan kesehatan. Pemeriksaan kolesterol sangat dipengaruhi oleh makanan maka disarankan untuk puasa karena dengan puasa konsentrasi kolesterol dalam keadaan sebenarnya. Kenaikan kadar kolesterol meningkatkan risiko kasus hipertensi, semakin tinggi kadar kolesterol maka semakin tinggi terjadinya kemungkinan hipertensi. Hal ini perlu diteliti apakah ada perbedaan kadar kolesterol dalam sampel serum pasien hipertensi yang diperiksa tidak puasa dan puasa 12 jam.

Tujuan penelitian : Mengetahui perbedaan kadar kolesterol dalam sampel serum pasien hipertensi yang diperiksa tidak puasa dan puasa 12 jam.

Metode penelitian : Penelitian ini merupakan penelitian pra-eksperimen dengan desain penelitian *the static group comparison*.

Hasil penelitian : Rerata Kadar kolesterol dalam sampel serum pasien hipertensi yang diperiksa tidak puasa adalah 183,625 mg/dl dan yang diperiksa puasa 12 jam adalah 171,825 mg/dl. Hasil uji statistik menunjukkan nilai Sig. (2-tailed) sebesar 0,133 yang lebih besar dari 0,05. Persentase selisih mean difference kadar kolesterol sebesar 6,42 % tidak melebihi $\pm 10\%$, persentase lower sebesar 2,137 % tidak melebihi $\pm 10\%$ sedangkan persentase upper sebesar 15,871 % melebihi batas $\pm 10\%$, nilai ini melebihi batas toleransi klinis yang diperbolehkan oleh *Clinical Laboratory Improvement Amendments (CLIA)*.

Kesimpulan : Kadar Kolesterol dalam Sampel Serum Pasien Hipertensi yang Diperiksa Tidak puasa dan Puasa 12 Jam, memberikan perbedaan yang signifikan.

Kata Kunci : Hipertensi, kolesterol, puasa, tidak puasa