

DIFERENCE IN TOTAL CHOLESTEROL LEVELS OF VEIN DAMS  
FOR 1 MINUTE AND 2 MINUTES

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**ABSTRACT**

**Background** : Tourniquet is known as one of the instruments used during the process of collecting venous blood. Blockage of the vein for more than one minute causes hemoconcentration which results in an increase in the concentration of protein-based analytes such as total cholesterol.

**Objective**: To determine the difference in total cholesterol levels in venous dams for 1 minute and 2 minutes.

**Methods** : This research is an analytic observational with a cross sectional design. This research was conducted in March 2022. The population of this research study was the VIII semester students of the applied undergraduate study program in Medical Laboratory Technology. The samples are 30.

**Results**: The mean total cholesterol level for venous damming for 1 minute was 193,23 mg/dL, while the average total cholesterol level for venous damming for 2 minutes was 200,60 mg/dL. The mean difference in total cholesterol levels in venous dams for 1 minute and 2 minutes was 7,37 mg/dL.

**Conclusion** : There is a difference in total cholesterol levels in vein inhibiting for 1 minute and 2 minutes with p value = 0,000.

**Keywords**: tourniquet, venous damming, hemoconcentration, total cholesterol

## PERBEDAAN KADAR KOLESTEROL TOTAL PEMBENDUNGAN VENA SELAMA 1 MENIT DAN 2 MENIT

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### ABSTRAK

**Latar Belakang** : Torniket merupakan salah satu instrumen yang digunakan pada saat proses pengumpulan darah vena. Pembendungan vena lebih dari satu menit menyebabkan hemokonsentrasi yang mengakibatkan peningkatan konsentrasi analit berbasis protein seperti kolesterol total.

**Tujuan** : Untuk mengetahui rerata kadar kolesterol total pembendungan vena selama 1 menit dan 2 menit serta selisih rerata.

**Metode** : Penelitian ini adalah observasional analitik dengan rancangan *cross sectional*. Penelitian ini dilaksanakan pada bulan Maret tahun 2022. Populasi studi penelitian ini adalah mahasiswa semester VIII program studi sarjana terapan Teknologi Laboratorium Medis. Sampel yang digunakan sebanyak 30.

**Hasil** : Rerata kadar kolesterol total pembendungan vena selama 1 menit 193,23 mg/dL sedangkan rerata kadar kolesterol total pembendungan vena selama 2 menit 200,60 mg/dL. Selisih kadar kolesterol total pembendungan vena selama 1 menit dan 2 menit 7,37 mg/dL.

**Kesimpulan** : Ada perbedaan kadar kolesterol total pembendungan vena selama 1 menit dan 2 menit dengan nilai  $p=0,000$ .

**Kata kunci** : torniket, pembendungan vena, hemokonsentrasi, kolesterol total