

**KORELASI KADAR TRIGLISERIDA SERUM
TERHADAP KELUARAN FUNGSIONAL PADA PENDERITA
STROKE ISKEMIK AKUT DI RSUD DR. ABDUL AZIZ SINGKAWANG**

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Intisari

Latar belakang. Strok merupakan penyebab utama kecacatan dan gangguan fungsional serta penyebab kematian nomor tiga di dunia. Beberapa penelitian dilakukan untuk memprediksi keluaran fungsional dengan menilai kecacatan dan pemulihan pasien strok. Kadar trigliserida serum sering digunakan sebagai prediktor keluaran fungsional. Hubungan trigliserida terhadap keluaran fungsional kontroversial dan masih terus diteliti. **Tujuan.** Mengetahui hubungan kadar trigliserida terhadap keluaran fungsional pada pasien strok iskemik. **Metode.** Penelitian ini merupakan penelitian observasional dengan rancangan *cohort prospective* yang dilakukan di bangsal penyakit dalam RSUD dr. Abdul Aziz Singkawang. Sebanyak 35 subjek penelitian dipilih dengan teknik *consecutive sampling* berdasarkan kriteria inklusi dan eksklusi. Data mengenai kadar trigliserida didapatkan dari hasil pemeriksaan darah di rekam medis ketika subjek masuk rumah sakit. Data mengenai keluaran fungsional didapat dari selisih skor hasil pemeriksaan langsung dengan instrument NIHSS (*National Institutes of Health Stroke Scale*) pada hari pertama (NIHSS₁) dan ketujuh (NIHSS₇), $\Delta_{\text{NIHSS}} = \text{NIHSS}_1 - \text{NIHSS}_7$. Hasil penelitian diuji dengan uji statistik Fisher dan uji korelasi Pearson untuk analisis bivariat. Sedangkan untuk analisis multivariat dengan variabel perancu usia, kadar kolesterol, dan kadar glukosa darah digunakan uji regresi logistik ganda. **Hasil.** Dari analisis statistik kadar trigliserida <150 mg/dl dan kadar trigliserida ≥ 150 mg/dl tidak terdapat perbedaan bermakna terhadap keluaran fungsional ($p=0,134$). Hasil uji korelasi menunjukkan adanya korelasi negatif bermakna antara kadar trigliserida terhadap keluaran fungsional yang diukur dengan penurunan skor NIHSS ($r=-0,335$; $p=0,049$). Hasil analisis multivariat menunjukkan kadar glukosa darah yang tinggi lebih berperan dalam perburukan keluaran fungsional (OR, 22,341; 95% IK 1,967-253,758; $p=0,012$).

Kesimpulan. Peningkatan kadar trigliserida berhubungan bermakna dengan penurunan keluaran fungsional dengan kekuatan korelasi yang sangat lemah.

Kata kunci: stroke iskemik akut, trigliserida serum, keluaran fungsional

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**CORRELATION BETWEEN SERUM TRIGLYCERIDE LEVELS AND
FUNCTIONAL OUTCOME OF PATIENTS WITH ACUTE ISCHEMIC
STROKE AT DOCTOR ABDUL AZIZ HOSPITAL SINGKAWANG**

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Abstract

Background. Stroke is the leading cause of disability and functional impairment and the third cause of death in the world. Several studies were performed to predict the functional outcome to assess disability and recovery of stroke patients. Serum triglyceride levels are often used as a predictor of functional outcome. The association between triglycerides and functional outcome is controversial and still under investigation. **Objective.** To find out whether there is an association between triglycerides serum level and functional outcome in patients with acute ischemic stroke in Doctor Abdul Aziz Hospital Singkawang. **Method.** Observational study with a prospective cohort design conducted in internal medicine wards Dr. Abdul Aziz Hospital Singkawang. A total of 35 samples were selected with consecutive sampling technique based on inclusion and exclusion criteria. Levels of triglycerides obtained from the results of blood test in the medical record when the subject were hospitalized. Functional outcome obtained from the result of difference between the results of examination directly with instrument NIHSS on the first day (NIHSS₁) and seventh (NIHSS₇), $\Delta_{NIHSS} = NIHSS_1 - NIHSS_7$. The results were analyzed using Fisher statistical test and Pearson correlation test for bivariate analysis. As for the multivariate analysis with confounding variables of age, cholesterol, blood glucose, and uric acid used multiple logistic regression. **Results.** From the statistical analysis of triglyceride levels <150 mg/dl and triglyceride levels ≥ 150 mg/dl there is no significant difference on the functional outcome ($p=0,134$). Correlation test results showed a significant negative correlation between the levels of triglycerides with functional outcome as measured by decreasing NIHSS scores ($r=-0,335$ $p=0,049$). Multivariate analysis showed that high blood glucose levels play a role in the worsening of functional outcome (OR, 22,341; 95%CI 1,967 to 253,758; $p=0,012$). **Conclusion.** Elevated triglyceride levels significantly associated with decreased functional outcome with a very weak correlation strength.

Key words: acute ischemic stroke, triglycerides, functional outcome

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