

LOW CHOLESTEROL AND INCREASED RISK: A REVIEW OF BLOOD LIPIDS AS PREDICTORS OF HEMORRHAGIC STROKE

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Article Info	ABSTRACT
Article History: Received 06/05/2026. Revised - Accepted 14/07/2026 Keywords: Cholesterol Hemorrhagic stroke Low-density lipoprotein Triglyceride Vascular rupture	<i>Hemorrhagic stroke is a neurological emergency caused by rupture of cerebral blood vessels, leading to intracerebral or subarachnoid bleeding. The World Health Organization (WHO) reported 7.6 million stroke-related deaths in 2020, with Indonesia showing the highest incidence in Asia. Low cholesterol levels, particularly Low-Density Lipoprotein (LDL), may weaken arterial wall integrity and increase the risk of hemorrhagic stroke. This study aims to examine the association between blood lipid profiles and hemorrhagic stroke and to assess cholesterol testing as an early screening tool. A literature review was conducted using clinical studies, epidemiological reports, and laboratory guidelines related to lipid metabolism and stroke. The findings indicate that low LDL levels reduce endothelial membrane elasticity, making vessels more prone to rupture. Low HDL and triglyceride levels may further aggravate vascular instability. Comprehensive lipid profile testing, supported by a head CT scan, is recommended for diagnosis and risk assessment. In conclusion, hypocholesterolemia, especially low LDL, is a significant predictor of hemorrhagic stroke. Routine lipid screening combined with lifestyle modification is essential for primary prevention.</i> Keywords: Cholesterol; Hemorrhagic stroke; Low-density lipoprotein; Triglyceride, Vascular rupture.
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