

The relation of blood lipids with ischaemic cerebral strokeMohamad Goldust,¹ Darioush Savadi Oskuii,² Maziar Hashemilar³

Madam, blood lipid is an independent risk factor of coronary heart disease.^{1,2} Evaluating the relationship between high levels of blood lipid and cerebral stroke was difficult due to the multiple nature of cerebral stroke.^{3,4} Studies conducted on patients suffering from coronary heart diseases revealed that lipid-lowering drugs decreased the risk of cerebral stroke.^{5,6} This study aimed at evaluating the role of blood lipids in patients suffering from ischaemic cerebral stroke. It was a case-control study, with the case group having all the patients suffering from their first ischaemic stroke. Main risk factors of cerebral stroke such as hypertension, diabetes, cardiac disease were noted in a questionnaire. Fasting blood samples of the ill patients were taken to determine parameters such as total cholesterol and triglyceride one day after hospitalisation. 53% were men and 47% were women, and the mean age was 64.6 years. There was statistically meaningful difference between total cholesterol level in all subjects of case and control groups, and in the case group it was more than that of the control group ($p < 0.001$). Additionally, mean total cholesterol in the case group subjects (women) was more than in the control group, but the difference was not statistically

meaningful. Mean of triglyceride level in the case group was more than that of the control group but the difference was not statistically meaningful ($P > 0.05$). Presenting interventional policies to lower cholesterol and triglyceride levels using primary prevention method such as modifying the diet, as well as drug interventions, especially in groups with other risk factors of cerebral stroke, may play a significant role in prevention from cerebral stroke.

References

1. Berger JS, McGinn AP, Howard BV, Kuller L, Manson JE, Otrros J, et al. Lipid and lipoprotein biomarkers and the risk of ischemic stroke in postmenopausal women. *Stroke* 2012; 43: 958-66.
2. Holm S, Ueland T, Dahl TB, Michelsen AE, Skjelland M, Russell D, et al. Fatty Acid binding protein 4 is associated with carotid atherosclerosis and outcome in patients with acute ischemic stroke. *PLoS One* 2011; 6: e28785.
3. Vaizova OE, Zautner NA, Alifirova VM, Vengerovski AI. [Influence of neuroprotectors with choline-positive action on the level of brain-injury markers during acute ischemic stroke]. *Eksp Klin Farmakol* 2012; 75: 7-9.
4. Parish S, Offer A, Clarke R, Hopewell JC, Hill MR, Otvos JD, et al. Lipids and lipoproteins and risk of different vascular events in the MRC/BHF Heart Protection Study. *Circulation* 2012; 125: 2469-78.
5. Duan H, Cai Y, Sun X. Platelet glycoprotein IIb/IIIa polymorphism HPA-3 b/b is associated with increased risk of ischemic stroke in patients under 60 years of age. *Med Sci Monit* 2012; 18: CR19-24.
6. Szilagyi S, Peter A, Magyar MT, Babgh S, Bereczky Z. Recurrent arterial thrombosis associated with the antithrombin basal variant and elevated lipoprotein(a) plasma level in an adolescent patient. *J Pediatr Hematol Oncol* 2012; 34: 276-9.

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