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The Ratio of Fibrinogen to Albumin is Related to the Occurrence of Retinopathy in Type 2 Diabetic Patients [Letter]

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Dear editor

Recently, an original study titled "The Ratio of Fibrinogen to Albumin is Related to the Occurrence of Retinopathy in Type 2 Diabetic Patients"¹ was published by Chen et al in the reputable journal "Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy". Firstly, I would like to congratulate the authors and acknowledge their successful publication.

The article concludes that fibrinogen to albumin ratio (FAR) is closely related to the development of DR in patients with T2DM, providing a basis for early detection, intervention and treatment of DR.

DR, its pathogenesis is not completely clear, most scholars believe that the occurrence of this disease and retinal micropathy related to damage to the vascular system.² Studies have shown that factors such as high glucose and retinal hypoxia can stimulate the expression of vascular growth factor, reduce the release of neovascularization inhibitor factor, and thus induce the formation of neovascularization.³ Studies have shown that vascular endothelial growth factor (VEGF) is closely related to the formation and development of ocular neovascularization. Studies have shown that increased plasma viscosity and hypoxia are one of the main reasons leading to the high expression of VEGF.

Studies have shown^{4,5} that high levels of fibrinogen may contribute to vascular disease by increasing blood viscosity, stimulating fibrin formation, or increasing platelet interactions.

Our suspicion is that the relationship between fibrinogen level and albumin ratio and diabetic retinopathy needs to be further investigated.

However, there are some limitations of the current study. First, this study was a retrospective study of clinical cases with some selection bias, and the sample size of this study was small, which needs to be validated by multicenter, large sample, and prospective studies in the future. Second, the relationship between the inflammatory mechanism of diabetic retinopathy and FAR deserves further study. Finally, long-term clinical observation of fibrinogen may also provide more information on the prognosis of patients.

Disclosure

The authors report no conflicts of interest in this communication.

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