

Any Variation Existing in Pathways Inducing Hyperlipidemia in Experimental Animal Models And in Real Humans May Cause Difference in Treatment Success


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Dear Editor,

We intentionally read the article "Synthesis and Anti-hyperlipidemic Activity of 3H-benzo [4, 5] thieno [2, 3-d] [1, 2, 3] triazin-4-ones: Possible Mechanism of Altered Lipid Metabolism" written by Gollapalle L. Viswanatha et al. with great interest.¹ They concluded that the newly synthesized tricyclic benzothieno 1,2,3-triazine derivatives possess significant anti-hyperlipidemic activity against dexamethasone and Triton WR-1339-induced hyper-lipidemia in rats. Thanks to the authors for their contribution of such a study that was successfully designed and well presented. We believe that the findings will enlighten further studies specifically towards the study of antihyperlipidemics and atherosclerosis.

We are aware that hyperlipidemia is strongly associated with the development of coronary artery disease, cerebrovascular accident and peripheral vascular disease. The success in decreasing serum lipid levels would thereby succeed in decreasing the morbidity and mortality of patients. In addition to lifestyle changes and exercise,² antihyperlipidemic drugs are a successful treatment for patients with atherosclerotic diseases. We theoretically know that we should treat approximately 1000 hyperlipidemic patients to protect one patient from any atherosclerotic event. Meaning that we should further investigate new drugs to decrease serum lipid levels in order to decrease mortality and morbidity. This study deserves to be emphasized in terms of such needs.

But the challenge we currently face on this issue is that hyperlipidemia induced in rats with dexamethasone and Triton WR-1339 may at least in any small amount be different from any hereditary or acquired hyperlipidemia in humans; in that there may be different enzymatic pathways and different physiological effects existing between these two entities. These differences may affect the treatment outcome. Hence, we highly recommend that the results from this study should be assessed in this regard.

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