

Vitamin D Receptor Gene Polymorphisms with Type 1 Diabetes Risk: Correspondence

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Dear Editor,

We would like to share ideas on the publication “Vitamin D Deficiency and Vitamin D Receptor Gene Polymorphisms with Type 1 Diabetes Risk: A South Indian Familial Study (1).” The purpose of this study was to determine the importance of vitamin D status and vitamin D receptor gene polymorphisms in connection to the risk of type 1 diabetes (T1D) in the South Indian population. One hundred-twenty T1D patients and 214 unaffected first-degree relatives (FDRs) participated in the study. The amplification refractory mutation system-polymerase chain technique was used to genotype VDR polymorphisms at four distinct loci (FokI, BsmI, TaqI, and ApaI). A group of 98 T1D patients and 75 age- and sex-matched siblings had their serum vitamin D levels checked using the ELISA technique.

The sample size is one potential weakness of this study. Despite the fact that the study comprised 120 T1D patients and 214 FDRs, a higher sample size would yield more solid and accurate results. Furthermore, the study was conducted on a specific demographic (South Indians) and may not be applicable to other ethnic groups. Another problem is that the study only looked at the relationship between VDR gene polymorphisms and T1D risk, not the relationship with vitamin D levels. The researchers did not look into the functional significance of these polymorphisms or the underlying processes that relate vitamin D insufficiency to the development of T1D. More research is required to

investigate these features and provide a more comprehensive grasp of the subject.

At the very least, certain genetic variants may be related to the pathophysiological mechanisms generating the reported clinical appearance. SNPs in the *SIRT1* gene are one illustration of this genetic variation (2). To ascertain the effect of any potential confounding polymorphisms, more investigation is required.

Ethics

Authorship Contributions

Concept: Hinpetch Daungsupawong, Viroj Wiwanitkit, Design: Hinpetch Daungsupawong, Viroj Wiwanitkit, Analysis or Interpretation: Hinpetch Daungsupawong, Viroj Wiwanitkit, Literature Search: Hinpetch Daungsupawong, Viroj Wiwanitkit, Writing: Hinpetch Daungsupawong.

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