COMMENT

Comment on M Maqsood, P Waheed, A Rashid, et al. (J Pak Med Assoc. 2023; 73: 978-982)

Aldose reductase gene polymorphism rs752010122 and retinopathy in type 2 diabetics

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Dear Editor, I read the article, entitled "Aldose reductase gene polymorphism rs752010122 and retinopathy in type 2 diabetics" enthusiastically.[1] The authors' efforts on this important topic must be appreciated. However, a few concerns arise regarding the validity of the study.

First, the authors did not mention the limitations of the study, including its single-center design and small sample size, thus limiting its generalizability and extrapolation to other centers. A brief account of the study's limitations helps to identify areas of improvement for future research.[2] Second, the importance of family history and ethnicity should not be ignored. A family history of diabetic retinopathy (DR) increases its risk in patients with T2DM up to three times.[3] Moreover, research has shown an increased likelihood of DR development in certain ethnicities, tipping the balance in favour of Hispanics, Asians, and Africans.[3] Third, the authors did not mention whether genotyping was performed by one or more researchers, and whether they were blinded to the patients' retinopathy status, suggesting a possible risk of reporting bias.

Fourth, the exclusion criteria did not include patients with dyslipidaemia, an important modifiable risk factor for DR that could have affected the findings of the study.[3] Fifth, this study provided no information on how patients were screened or confirmed to have T2DM and DR. Instead of relying on self-reporting or previous medical records, cases should be confirmed through haematological workup and fundus examination to eliminate the chances of error.[4] Lastly, considering the increased susceptibility of DR in patients with impaired kidney function, the patients with nephropathy should have been excluded from the study to mitigate the risk of confounding bias.[5]

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