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Changes in Contrast Sensitivity in Young Adults with Diabetes

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Abstract

Background: This study compared contrast sensitivity and visual acuity of young adults with diabetes to that of controls and attempted to identify predictors of dry eye symptoms in patients with diabetes. Methods: This cross-sectional study, which included 37 patients with diabetes and 37 controls, was conducted in the Optometry Clinic of Kulliyah Allied Health Science. All participants were aged between 19 and 39 years. Inclusion criteria were a diagnosis of diabetes without any evidence of ocular disease, abnormalities in colour vision or media opacity. Results: The contrast sensitivity significantly differed between patients and controls ($p = 0.045$). A multiple regression analysis showed that contrast sensitivity was a significant predictor of ocular symptoms in patients with diabetes, and this was statistically significant ($p = 0.002$). Conclusions: Contrast sensitivity may be affected during early ocular changes among young adults with diabetes. It may also predict the occurrence of dry eye symptoms in such patients.

Keywords

Author Keywords: **contrast sensitivity; diabetics; dry eye; young adult**KeyWords Plus: **DRY EYE; INDEX; RELIABILITY; VALIDITY; DISEASE**

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