Noninvasive Skin Fluorescence Spectroscopy for Diabetes Screening

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Abstract

The development of cost-effective, simple, and reproducible tests for diabetes screening represents a priority of modern medicine in light of the increasing prevalence of diabetes mellitus. Besides fasting plasma glucose, the oral glucose tolerance test, and glycated hemoglobin A1c, several tests have been proposed, among them the assessment of skin fluorescence spectroscopy (SFS). This article comments on the article by Olson and coauthors published in this issue of Journal of Diabetes Science and Technology and comprehensively reviews related available information. Overall, SFS seems to represent an easy-to-use, noninvasive tool that adds value to existing tests for diabetes screening.


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Abbreviations: (AGE) advanced glycation end product, (CV) coefficient of variation, (FPG) fasting plasma glucose, (HbA1c) glycated hemoglobin A1c, (IGT) impaired glucose tolerance, (OGTT) oral glucose tolerance test, (SFS) skin fluorescence spectroscopy, (T2DM) type 2 diabetes mellitus

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