Evaluating the accuracy of the visual field index for the Humphrey visual field analyser in a population of patients with mild to moderate glaucoma

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The purpose of our research was to evaluate the accuracy of the visual field index, created for the Humphrey Visual Field Analyzer, in a population of patients with mild to moderate glaucoma. Our study included 42 patients (61 eyes) who had at least 11 years of follow-up in the same glaucoma clinic. Each patient was required to have completed at least one reliable visual field per year. We then divided the compiled visual fields into 2 series; years 1-5 and years 6-11. The first series was used to provide the predicted visual field outcome value and the second series was used as the actual observed value. During our collection of data, a subgroup of patients with at least 1 unreliable visual field in their series was identified. Initially, the unreliable fields were removed to render our predictions. The unreliable fields were then reintroduced to create a comparison. We found that the visual field index software rendered an accurate prediction with a slight overestimation of visual field deterioration. Further evaluation revealed that the software was most accurate for those patients whose predicted visual field index was greater than 90%. The accuracy then declined when the predicted visual field index fell below 90%. There was no statistical difference between the reliable and unreliable groups of visual fields. Am J Ophthalmol. 2013 Dec; 156(6):1272-6

Biography

Renee Talbot completed her medical school at the University of Ottawa (Canada). She then pursued an ophthalmology residency at the University of British Columbia in Vancouver. After graduation, she returned to Ottawa where she works in a private practice. In the summer of 2014, Talbot will be returning to Vancouver for a glaucoma fellowship. renee.a.talbot@gmail.com