

Case report

Error in Measurement of Visual Field Caused by False Eyelashes: A Case Report

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Abstract

Many cosmetic enhancements to the natural appearance of the eyes are readily available today. A relatively popular form of eye beauty enhancement is false (fake) cosmetic eyelashes and eyelash extensions. Due to the increasing popularity of these cosmetic products, it is essential for ophthalmologists to be aware of their potential risks and complications. Here we report a case of error in visual field print out caused by false eyelashes.

Keywords: Eyelashes; Cosmetics; Visual Fields.

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Introduction

Many cosmetic enhancements to the natural appearance of the eyes are used today including false (fake) cosmetic eyelashes and eyelash extensions¹. While false eyelashes are applied to the eyelid as a whole eyelash extensions are applied lash by lash to natural eyelashes to enhance the length, curl, fullness, and thickness of natural eyelashes². In both cases a form of glue might be used to attach the false eyelashes to the eyelid or eyelash extensions to the natural eyelashes³.

Due to the ever increasing popularity of these cosmetic products, it is essential for ophthalmologists to be aware of their potential risks and complications such as allergic reactions, dry eye, eye infection and asthma caused by false eyelashes and eyelash extensions, the glue used to attach them, or the solvents used to remove these products¹⁻⁶. A rarely examined aspect of these cosmetic products other than eye complications is how they might affect eye exams. Here we report a case of error in visual field print out caused by false eyelashes.

Case Report

This case report was approved by our institutional ethics committee and written consent obtained from the patient before

reporting the case. The patient was a 52-year-old woman who referred to Imam Hossein Eye Clinic, Tehran, Iran, for routine check-up. The vision in both eyes was 10/10. The eye pressure was 15 mmHg in both eyes. The fundus examination was normal and the cup / disc ratio was 0.3. Also the thickness of the retinal nerve fiber layer was normal. In initial visual field examination there was a reduction of the superior visual field in both eyes (Figure 1). With more attention to the patient, we realized that the patient's false eyelashes might have caused the visual field reduction. The visual field examination was repeated after the removal of the false eyelashes and indicated a normal visual field this time. To the best of our knowledge this is the first report of the effect of false eyelashes on the patient's field of view examination results in the English literature.

Discussion

Visual field assessment is an important part of full eye examination and should be performed at baseline and periodically in the follow-ups⁷. Common causes of visual field defects include glaucoma, vascular disease, drug side effects, neurological conditions such as cerebrovascular diseases, traumatic brain injury and brain tumors, retinal and hereditary diseases, optic neuritis, and nutritional deficiencies⁸⁻¹³. Physical causes of visual

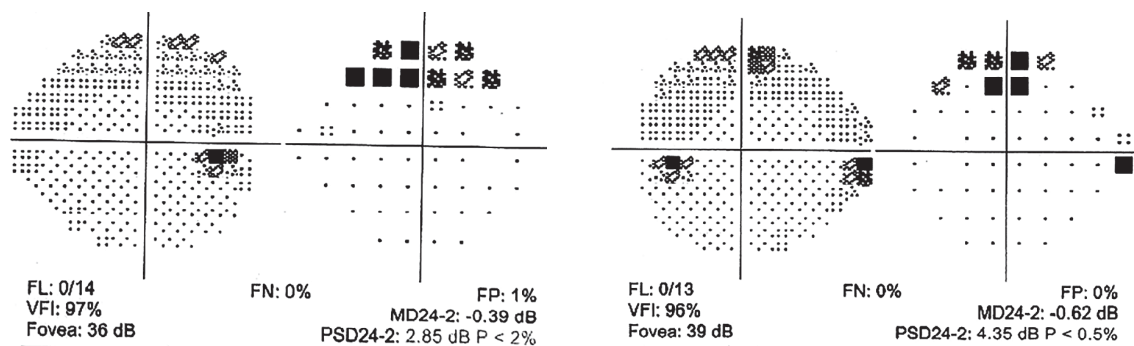


Figure 1: The reduction of the superior visual field in both eyes observed in the visual field exam results caused by fake eyelashes.

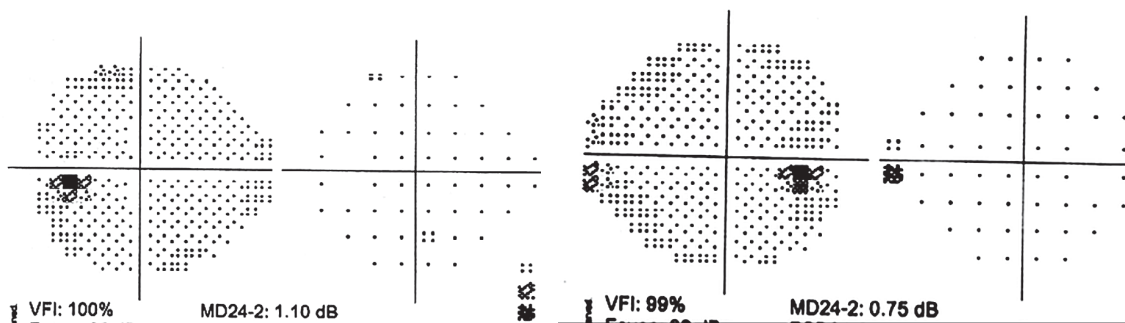


Figure 2: The normal visual field in both eyes observed after the removal of fake eyelashes.

field deficit include blepharoptosis and thick rimmed eyeglasses^{14,15}.

Here we reported how wearing fake eyelashes might lead to erroneous results in examination of the visual field. In our patient wearing fake eyelashes resulted in a report of reduced superior field of view in her examination of the visual field. Our case shows the importance of removing any physical obstacles which might limit the field of view, like fake eyelashes in our case or thick rimmed glasses, before performing the field of view examination by the operator.

Conclusion

Fake eyelashes or eyelash extensions might cause errors in reporting the visual field exam results. The operator should be aware of their potential for physically limiting the field of view and remove them before performing the test.

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Footnotes and Financial Disclosures

Conflict of interest

The authors have no conflict of interest with the subject matter of the present study.