

Case Report

Far Distance Blurry Vision Following Rhinoplasty

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Abstract

Rhinoplasty surgery changes the shape of the nose. The motivation for rhinoplasty may be to change the appearance of the nose, improve breathing, or both.

A 25-year-old patient was referred to the Basir clinic for a visual evoked potential (VEP) examination. The patient complained from far distance blurry vision after rhinoplasty. Her magnetic resonance imaging (HRI) and VEP examination were normal. The present work explains her case.

Keywords: Blurry Vision; Rhinoplasty; Visual Evoked Potential.

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Introduction

Rhinoplasty is an elective plastic surgery that improves the shape of the nose. It is among the most popular cosmetic procedures worldwide. Similar to other surgeries, rhinoplasty is associated with certain complications. The visual system could be affected during rhinoplasty, and intraoperative orbital hemorrhage is the most common symptom of this operation ¹.

A rare but devastating complication of rhinoplasty is blindness. Cheney ML et al. (1987) reported a case of unilateral blindness secondary to central retinal artery occlusion following an open septorhinoplasty ². Shushtarian SM et al. (2020) reported a case of total blindness following anaphylactic shock due to co-amoxiclav treatment. They used visual evoked potential (VEP), a technique to screen the visual system (mainly, visual pathway), to identify the possible cause of blindness ³. VEP can be used in patients with severe visual loss to examine the possible visual pathway involvement in these patients. Sarzaeim F et al. (2022) used the flash type of VEP to examine the visual pathway on 20 eyes with different visual fall stages due to head accidents. Most patients had severe falls in visual acuity. They concluded that flash VEP is a suitable diagnostic technique in patients with head trauma and severe fall in visual acuity ⁴.

VEP can also be tested in patients with complete visual acuity. Hajibeygi R et al. (2020) worked on 20 female subjects with Sjogren's syndrome and 10/10 visual acuity. VEP was tested in the whole case group and compared with the control group. The authors concluded that the visual pathway remained intact in patients and could be diagnosed by VEP ⁵.

Numerous references exist on the usefulness of

VEP in different physiological and pathological conditions of the visual system ⁶⁻¹⁶.

In the present work, VEP is examined in a patient with continuous blurry vision four months after rhinoplasty.

Case report

A 25-year-old female patient was referred to the Basir clinic for a VEP examination. She complained from far distance blurry vision for four months after the rhinoplasty. The patient underwent routine eye examinations before the VEP examination. Her visual acuity was 4/10 and 3/10 for the right and left eyes, respectively. These were corrected by 1.25×- 1.00×5 and 1.75×1.00×175 lenses for the right and left eyes, respectively. The MRI of the patient was normal, without any suspected symptoms. The VEP results showed that the P100 peak implicit time was 95 and 96 m/sec for the right and left eyes, respectively (the normal value for VEP, P100 peak latency is approximately 100 m/sec with the equipment in the clinic).

Discussion

Blurry vision is a rare side effect of rhinoplasty that usually disappears a few days after surgery. The routine eye examinations, VEP, and MRI of the patient in the present study were normal. There are a few references in this regard discussed as follows.

Visual complications following rhinoplasty are rare and appear in a few case reports. Ansari-Astaneh (MR 2022) reported unilateral blindness in a 22-year-old patient after rhinoplasty. The patient's history revealed that she had transient visual loss due to migraine aura and vasospasm, and she was diagnosed with central retinal artery occlusion (CRAO). She was treated with mannitol and intravenous hydrocortisone, and her visual acuity improved to 1/10 after a two-month follow-up ¹⁷.

Intraoperative orbital hemorrhage and blindness have also been reported in two references ^{1, 2}. A less related reference deals with visual complications due to underlying diseases during eye surgeries.


Shushtarian (SM 2020) reported a 39-year-old patient complaining of diplopia and blurry vision on his second refractive surgery attempt. It was found that the patient had the underlying disease of demyelination that accidentally occurred after the operation ¹⁸.

Naser M et al. (2017) reported visual disturbances in a patient following refractive

surgery. The patient's history showed that the patient was under amiodarone treatment. The cause of the visual disturbance was determined as the underlying disease, not the surgery ¹⁹.

The patient in the present study had satisfactory rhinoplasty surgery and did not suffer from underlying diseases. Therefore, future follow-ups are necessary to identify the possible cause of blurry vision in this patient.

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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 manuscript.