Facial Herpes Zoster Following Rhinoplasty: A Rare Complication

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Varicella zoster virus (VZV) is the causative agent of varicella and herpes zoster infections. It manifests in a fever, fatigue, and rashes on the skin. The virus remains latent in neuronal cells after infection and can reactivate later, causing herpes zoster disease, which presents as a painful rash. In most cases, the herpes zoster condition occurs suddenly and unexpectedly. After short prodromal evacuation, groups of herpetiform vesicles are seen in a unilateral band along the line of a peripheral nerve. The most common symptoms are pain, dysesthesia, and paresthesia. Risk factors for herpes zoster infection include advanced age and immune insufficiency. We present a case of herpes zoster following rhinoplasty.

A closed aesthetic rhinoplasty operation was performed on a 32-year-old woman in May 2017. One week after the operation, the splint on her nose was removed and tape was applied. Four days later, the patient presented with complaints of acne-like sores, pain, and restlessness occurring on the right half of her face (Figure 1A and D). She was found to have vesicular lesions extending from the root of her nose to her hairline in the frontal region of the right half of her face. The temperature in this region was also increased unilaterally. There was edema and redness around the eye. Herpes zoster was diagnosed in consultation with dermatology and ophthalmology specialists. Several medications were prescribed for this patient: Valaciclovir tablets (Valtrex, GlaxoSmithKline, Brentford, Middlesex, England) as oral antivirals; a nonnarcotic, Metamizole sodium ampul (Andolor-IE Ulagay, İstanbul, Turkey), to control pain and fever; an antihistamine tablet, Ebastin tablet (Kestine-Laboratorios Almirall, Barcelona, Spain), to prevent itching; and Ampicillin + sulbactam tablets (Sulcid-IE Ulagay, Istanbul, Turkey) as a prophylactic against infection. Fusidic acid cream (Fucidin-Abdi Ibrahim, Istanbul, Turkey) was suggested for treatment of external lesions. Multivitamin drugs were used as a supportive measure. During the treatment, the lesions rapidly regressed (within 3 weeks), and symptoms decreased. The hyperemic area was protected from sun exposure during this period (Figure 1B, C and E, F). Written informed consent was acquired from the patient.

VZV reactivation may occur spontaneously, or because a person's immune resistance has decreased.1 Herpes zoster typically occurs as vesicular lesions along one or two dermatomes.1 Ophthalmic nerve is the most common involved branch of the trigeminal nerve. The prodromal stage lasts approximately 48 to 72 hours, during which time a maculopapular rash appears along the affected dermatome line, which gradually develops into vesicular lesions. Classically, this disease begins with numbness along the skin and mild to moderate burning tingling, with vesicular lesions occurring unilaterally.3 In our case, tingling began before the lesions appeared. It was accompanied by regional sensitivity and pain, but the patient had no headaches or discomfort that affected the rest of the body. Herpes zoster in the head region may be accompanied by facial edema, which was seen in this case.1 Edema was observed on eyelids and in the periocular

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Figure 1. (A, D) Preoperative views of this 32-year-old woman. (B, E) Postoperative views on the 10th day, vesicular lesions on face. (C, F) Postoperative views at one month, after medical treatment.

region. Regional pain may be mild to severe, even to mild stimuli, and lead to spasms. Pain also decreases when the lesions are most active. The lesions are dry, and the skin becomes scaly after 3 to 5 days. The total duration of the disease is 7 to 10 days. However, hypopigmentation remaining after the lesions heal may take several weeks to return to normal. Pain may persist after the lesions heal. One of the common complications of herpes zoster is secondary bacterial infections. Cellulitis and necrotizing fasciitis can be seen in these lesions, and are caused by Group B β -hemolytic streptococci. For this reason, oral and topical prophylactic antibiotic therapy is often employed to mitigate the risk of secondary bacterial infection. Although herpes zoster is a self-limiting disease, starting antiviral treatment early in the disease can

reduce the severity of the lesions and shorten the healing period. Early treatment also reduces possible complications and morbidity.^{1,3}

Herpes zoster conditions are not very common in plastic surgery clinics. We have seen one case of herpes zoster following rhinoplasty in the literature,⁵ and our case is the second one. Surgical trauma to the body and postoperative stress in the patient can cause reactivation of VZV. We wanted to show that herpes zoster can be seen even in young aesthetic surgery patients with high morale and motivation. It should also be emphasized once again that early diagnosis and early treatment can reduce complications such as secondary infection, scarring, hypopigmentation, neuralgia, and patient morbidity.

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