

## Case Report

# The precedence points of nasal herpes simplex: a case report

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**Received:** 11 February 2025

**Revised:** 15 May 2025

**Accepted:** 22 May 2025

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### ABSTRACT

There are very few documented occurrences of nasal herpes, a kind of facial herpes, in the literature. It is an uncommon appearance. This case report describes a patient who developed a herpes simplex lesion over the tip, alar lobule, and dorsum of the nose. Because of the unusual presentation and rarity of the condition, the patient was initially treated with oral anti-bacterial therapy. However, after the patient's symptoms did not improve, the patient was treated with the appropriate antiviral medications, and the lesion completely disappeared. The example illustrates an uncommon location for a common ailment with an unusual appearance.

**Keywords:** Herpes simplex, Nose, Antiviral therapy, Uncommon

## INTRODUCTION

There are two varieties in which it manifests: herpes simplex type 1 (HSV-1) and herpes simplex type 2 (HSV-2). In immunocompromised patients, cold sores and facial herpes are the most common presentations of HSV-1, with stromal keratitis and meningitis and encephalitis occurring sporadically.<sup>1,2</sup> An HSV infection over the dorsum of the nose or intranasally causes nasal herpes, a kind of facial herpes.

Reports of intranasal forms that mimic acute invasive fungal sinusitis in immunocompromised persons or manifest as a mass (hypertrophic lesion) over inferior turbinate have been made.<sup>1,3</sup> Rarely do moderate external nasal lesions form on their own, without involving other face locations. Severe external nasal lesions are typically observed in immunocompromised patients.<sup>4</sup> From this point forward, we present a case of atypical nasal herpes simplex infection in an immunocompetent male patient, exhibiting lesions strewn across the dorsum, ala lobule, and tip of the nose. The patient had received several treatments from a local physician but had not experienced

any improvement. An otorhinolaryngologist consultation resulted in a clinical and laboratory diagnosis, as well as the initiation of pharmaceutical therapy for the patient.

## CASE REPORT

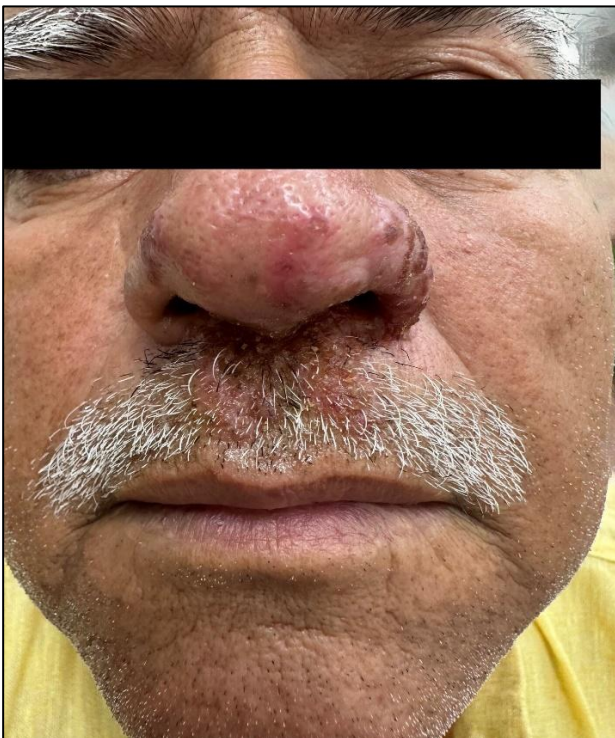
A sixty-four-year-old immunocompetent male presented to our outpatient department with chief complaints of lesions progressing over the dorsum, alar lobule and tip of nose from last two weeks. Initially before visiting our clinic, the patient took medication from general medical practitioner but was unable to achieve any remissions in symptoms.

Figure 1 shows the lesions involving the dorsum of nose, alar lobule and tip of nose. It was associated with mild intermittent pain for past three days which got resolved only after taking oral medication i.e., paracetamol six hundred and fifty milligrams thrice a day. He had a minor fever for the previous week, which was diagnosed as an upper respiratory tract infection (URTI) after his medical history was obtained. Other symptoms of the URTI were itching on the surface of his nose and nasal discharge. He

had never before experienced herpes infection. His facial nerve examination revealed no abnormalities, and he had no otologic signs or symptoms. An endoscopy of the nose revealed no intranasal involvement. Along with the other hematological tests, the patient's total blood counts, liver function tests, kidney function tests, and fasting and postprandial blood sugar levels were all within normal bounds. His temperature was measured at 37.9°C and all other vitals were stable.

Because this site is uncommon for herpes simplex, the patient was initially treated with oral antibacterial therapy consisting of amoxicillin-clavulanic acid six hundred and twenty-five milligrams eight hourly for five days. Additionally, the patient received topical application of Neosporin ointment in the light of the possibility of nasal furunculosis with vestibulitis. Nevertheless, there was no change in the patient's health, after which he presented to our ear, nose, throat outpatient department and the diagnosis of herpes simplex type one was mostly based on clinical suspicion.

The patient was prescribed four hundred milligram of oral acyclovir three times a day for one week, twice daily administration of mupirocin ointment locally, and precautionary advice to isolate himself at home. IGM and IGG antibodies to the herpes simplex virus (HSV) were found serologically. Regarding HSV IGG type 1, the enzyme immunoassay (EIA) value was 1.25. By using a polymerase chain reaction (PCR) to detect HSV 1 DNA, the diagnosis was verified. Figure 2 shows the remission of symptoms and lesions on day fifteen.



**Figure 1: Lesions involving the dorsum of nose, alar lobule and tip of nose.**



**Figure 2: The remission of symptoms and lesions on day fifteen.**

## DISCUSSION

An eye-opening case report describes a sixty-four-year-old man without concomitant conditions who had nasal herpes simplex virus (HSV) infection. The infection was first misdiagnosed as a skin and soft-tissue infection and treatment with respect to that was started in the form of oral antibiotics i.e., amoxycillin plus clavulanic acid sixty twenty-five milligrams thrice a day for seven days.

This case report highlights the wide differential diagnosis and the practical management techniques for HSV infections, reinforcing the diagnostic difficulties and underscoring the value of a holistic approach to patient care. An HSV infection can manifest as hepatitis, esophagitis, genital ulcerations, keratitis, chorioretinitis, encephalitis, bell palsy, gingivostomatitis, dermatitis herpeticum, erythema multiforme, and herpetic whitlow.

Because it is dormant in the dorsal root ganglia of sensory neurons, it can cause primary, latent, and recurrent infections. Stress on the body, stress on the mind, and immunosuppression are all possible reactivation triggers.<sup>4</sup> Polymerase chain reaction testing or culture of swabs from the base of ulcerative lesions are two methods that can be used to evaluate cutaneous or mucosal HSV.

However, there is debate on the sensitivity and specificity of these tests in diagnosis, and their usefulness also varies depending on the testing kit and procedure employed.<sup>1,6</sup> For this reason, clinical judgment is essential and can be supported by laboratory testing. Similar to this patient, an immunocompetent person with a distant history of nose trauma has been described to exhibit vesiculation and ulceration of the dorsal surface of the nose without intranasal involvement as a result of HSV infection.<sup>5</sup>

Critical insights into the challenges of diagnosing and treating HSV infections, particularly in non-typical presentations, can be gained from following the patient's path from the beginning of symptoms until recovery.

## CONCLUSION

An unusual differential diagnosis for sores over the nose is nasal herpes simplex. Complete remission without any problems is possible with a high index of suspicion and quick antiviral treatment. This case describes a common facial herpes simplex condition in an uncommon place, the tip of the nose, with an emphasis on priority points for timely clinical diagnosis.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Ishita, Kaur J, Sharma N. The precedence points of nasal herpes simplex: a case report. *Int J Otorhinolaryngol Head Neck Surg* 2025;11:435-7.