

## Clinical Image / Klinik Görüntü

DOI: 10.5578/ced.20240310 • J Pediatr Inf 2024;18(3):e201

## **Recalcitrant Herpes Zoster Developing After Laser Epilation**

Lazer Epilasyon Sonrası Gelişen İnatçı Herpes Zoster

Ergin Çiftçi¹(İD), Döndü Nilay Penezoğlu¹(İD), Belkıs Hatice İnceli¹(İD), Hülya Akat¹(İD), Elif Somuncu¹(İD), Gül Arga¹(İD), Selin Sevinç²(İD), Zehra Şule Haskoloğlu²(İD), Halil Özdemir¹(İD)

- <sup>1</sup> Division of Pediatric Infectious Diseases, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara, Türkiye
- <sup>2</sup> Division of Pediatric Immunology Allergy, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara, Türkiye

Available Online Date: 13.09.2024

Cite this article as: Çiftçi E, Penezoğlu DN, İnceli BH, Akat H, Somuncu E, Arga G, et al. Recalcitrant herpes zoster developing after laser epilation. J Pediatr Inf 2024;18(3):e201.

A 17-year-old female patient presented with complaints of redness, rash, and pain on her right elbow that began a week ago. Her examination revealed grouped vesicles on the erythematous surface of the right elbow and forearm. No other pathology was detected in her systemic examination. The patient had no known chronic disease or allergy; she was not taking any medication, and she had not had another infection recently. However, it was learned that she had laser epilation on her arms five days before the rash began. The patient was hospitalized with a preliminary diagnosis of herpes zoster, and intravenous acyclovir and hydration were started. Laboratory examinations revealed normal complete blood count, acute phase reactants, and biochemical parameters. Varicella zoster virus (VZV) IgM was negative, IgG was positive, and herpes simplex virus (HSV) type 1 and type 2 IgM and IgG were negative. Polymerase chain reaction (PCR) was used to study M-pox, parvovirus B19, measles, rubella, VZV, HHV-6, HHV-7 and enterovirus in the fluid inside the vesicle and in the serum. Varicella zoster virus PCR was detected positive in the serum and vesicle fluid. The patient's rash began to regress only after the eighth day of treatment. The patient was discharged on the tenth day of treatment and received oral valacyclovir treatment for five days. No tests for acyclovir resistance could be performed. Tests for immunodeficiency were found to be within normal limits. No recurrence was observed in the patient's follow-up.

Varicella zoster virus is inoculated into the mucosa through inhalation or direct contact with the patients' skin lesions. In

primary VZV infection, known as chickenpox, a widespread, itchy erythematous rash with papules, vesicles and crusted rashes is seen together. During the primary infection, the virus remains latent in sensory (dorsal root, cranial nerve and autonomic including enteric) ganglia. Varicella zoster virus reactivation can be triggered by ultraviolet light, immunosuppression, hyperthermia, trauma, or emotional stress. It results in herpes zoster (shingles), which is characterized by localized, vesicular skin lesions, usually in the dermatomal distribution of a single sensory nerve. It is most seen in the thoracic and lumbar regions and may be accompanied by pain or pruritus. Acyclovir is effective in the treatment of herpes zoster in both healthy and immunocompromised patients. When treatment is started within the first 72 hours after the onset of herpes zoster, both pain and new lesion development are reduced, and complete recovery is achieved within a few weeks. In this case, it was thought that the appearance of the rash and its recalcitrant course may have been due to the fact that it developed after laser epilation.



Correspondence Address/Yazışma Adresi Ergin Çiftçi

Division of Pediatric Infectious Diseases, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara-Türkiye

E-mail: erginciftci@gmail.com