

# CASE REPORT

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## ACUTE HERPETIC GINGIVOSTOMATITIS IN AN ADULT PATIENT AGED 45 YEARS ASSOCIATED WITH LOCAL FACTORS

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**ABSTRACT:** The present article describes a clinical case of an adult systemically healthy patient, who reported to the dental office complaining of sore mouth or burning sensation and an inability to eat. By means of case history and clinical evaluation the diagnosis of acute herpetic gingivostomatitis was reached. The treatment was prescription of an antiviral agent associated with antiseptic and anaesthetic gel. One week after their onset, there was complete regression of lesions. A thorough supragingival and sub gingival scaling were performed 1week following the regression of the lesions.

**KEYWORDS:** Acute herpetic gingivostomatitis, viral infection in adults, rare cases of herpes.

**INTRODUCTION:** Acute (primary) herpetic gingivostomatitis (AHGS) represents the main pattern of primary infection with herpes simplex viruses.<sup>1</sup> AHGS typically affects children, but rarely, this infection also occurs in adults. Because of the limited symptoms, a dentist may be the first health care practitioner consulted.<sup>2</sup> It is therefore important for dentists to be able to recognize the condition.

More than 90% of AHGS cases are caused by the herpes simplex virus type I (HSV-I) and occasionally by herpes simplex virus type II (HSV-II). Both virus types produce similar clinical manifestations.<sup>3,4</sup> HSV is a double-stranded DNA virus and is a member of the human herpes virus (HHV) family officially known as Herpetoviridae.<sup>5,6,7</sup> The 2 forms of HSV have a similar structure but differ in antigenicity, although HSV-2 is reputed to be of greater virulence.<sup>8</sup>

The infection is acquired by close oral mucosa contact with infected saliva or perioral lesions.<sup>9, 10</sup> The severity of signs and symptoms may be attributable to the virulence of the specific strain of HSV and the host's immune response. The sero prevalence of HSV-I antibodies in patients varies in different geographic areas.<sup>11</sup>

One single virus cannot produce disease and in order to achieve a substantial number of viruses intracellular replication take place in a prodromal period which is estimated to last one week, during which the patient does not present any symptom. When the infection is symptomatic, the onset is usually abrupt, with fever, chills, malaise, flulike symptoms, pharyngitis, and cervical adenopathy. The chief complaints are more often dysphagia (sore throat) and/or sore mouth or burning sensation. After a short period, a clustered, short-lived vesicular eruption appears, followed by painful superficial ulcers circumscribed by a red halo. Lesions can occur virtually in any area of oral mucosa and occasionally on perioral skin.<sup>3,10,12</sup>

In some cases, inflammatory gingivitis can be observed, as well. Other symptoms common in primary herpes are halitosis, excessive drooling, and hyper salivation. Dehydration is a common complication of primary herpes resulting from eating and drinking difficulties.<sup>6</sup> Other

# CASE REPORT

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complications include Bell's palsy, viremia, ocular involvement, herpetic esophagitis, and meningoencephalitis.<sup>13, 14</sup>

The objective of the present article is to describe a clinical case of an adult aged 45 years otherwise systemically healthy who developed a condition of acute (primary) herpetic gingivostomatitis.

**CASE REPORT:** A patient A, a 45 year old man, residing at pune, India, otherwise systemically healthy reported to our dental office (Department of Periodontics, PMNM Dental College Bagalkot, Karnataka, India) with a chief complaint of sore mouth and burning sensation with an inability to eat. He had visited a physician at pune for fever 3 days before reporting to our department for which he was given systemic cephalosporin and anti-pyretics. According to the patient he developed mouth ulcers as a reaction to the antibiotics. On stopping the medication after one single dose he approached another physician and was advised ciprofloxacin. He stopped the medication again with a single dose as a similar reaction even to the above drug.

A thorough history revealed the lesions began as vesicles that rapidly burst. Clinical examination was preceded by 0.2% chlorhexidine rinse. Clinically the lesions presented as multiple erosions on the lateral borders, dorsum of the tongue, fiery red inflamed enlarged gingiva which showed more prominence towards the anterior palatal gingiva with multiple ulcerations on the palatal side. Few ulcers were also seen on the junction of hard and soft palate and buccal interdental papilla of right maxillary molar. The gingiva bled on even slight provocation. According to the patient no such episodes have occurred before.

From the clinical evaluation and the data informed by the patient, the diagnosis of acute herpetic gingivostomatitis was reached. The patient was prescribed oral acyclovir 220mg every 4 hours for 5 days and Quadragel application to relieve him of sore mouth and prevention of secondary infection. A cold and pasty diet was recommended. The patient returned a week later with complete remission of the lesions. A thorough full mouth disinfection followed by supragingival and subgingival scaling was done following the remission period.

**DISCUSSION:** The present article described the clinical case of an adult patient, who suffered an attack of acute herpetic gingivostomatitis.

From the clinical characteristics presented by the lesions, the possibility of these being aphthous lesions was discarded. The differential diagnosis includes infection by other microorganisms, particularly from the coxsackie group; streptococcal pharyngitis; erythema multiform; necrotizing ulcerative gingivitis; and aphthous stomatitis.<sup>10</sup>

From the clinical aspects and the patient's clinical history, the diagnosis of primary herpetic gingivostomatitis was reached. The diagnosis of primary herpetic gingivostomatitis is generally defined by the clinical data, and no confirmative tests are necessary.<sup>15</sup>

It is worth pointing out that primary infection by HSV-1 can be subclinical or symptomatic.<sup>16</sup> Its severity will depend on the degree of viral replication, host's response to the pathogen, and the speed with which latency is established.<sup>2</sup>

# CASE REPORT

The therapeutic procedure in this case was the use of oral acyclovir 220mg every 4 hours for 5 days and mouth washing with 0.12% chlorhexidine digluconate solution to prevent secondary infection<sup>15</sup>. There was regression of the lesion after one week.

The dentist (Periodontist) plays a remarkable role in the diagnosis of primary acute herpetic gingivostomatitis considering that due to the rich symptomatology of oral lesions, he/she is the first professional to be consulted. This being so, it is important for him/her to be capable of recognizing the disease and creating the best conditions for the well-being of his/her patient.

Moreover, the acute forms of HSV virus infection are highly transmittable. This potential is of particular interest to dental professionals who are exposed to contact with herpetic lesions on a day to day basis. For this reason, every type of protective apparel (Protective goggles, mask, gloves, cap and overalls) must constantly be used, especially due to the cases of subclinical manifestations that may not be detected. Patients must be instructed with respect to the possibility of transmission of the virus, and also of the need to diminish close contact in the presence of active lesions, in order to prevent the contamination of other areas of the body.

In conclusion, from the case described, the possibility of the occurrence of primary acute herpetic gingivostomatitis in an adult patient becomes evident, and the periodontist must be alert to the clinical findings, considering that no matter how unlikely a diagnostic hypothesis may be, it cannot be the only datum taken into consideration for arriving at the final diagnosis.



**Pre op hard palate**



**Post op hard palate**



**Pre op lateral surface of tongue**



**Post op lateral surface of tongue**

# CASE REPORT



**Pre op tongue dorsum**



**Post op tongue dorsum**



**Pre op mandibular lingual  
Side on gingiva**



**Post op mandibular lingual  
side on gingiva**

## REFERENCES:

1. Crumpacker CS. Viral and rickettsial diseases. In: Freedberg IM, Eisen AZ, Wolff K, et al (eds). Fitzpatrick's Dermatology in General Medicine, 5 ed. New York: McGraw-Hill, 1999:2415–2424.
2. Chauvin, P. J. & Ajar, A. H. Acute herpetic gingivostomatitis in adults: a review of 13 cases, including diagnosis and management. J. Can. Dent. Assoc., 68:247-51, 2002.
3. Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and Maxillofacial Pathology. Philadelphia: Saunders, 2002:213–220.
4. Esmann J. The many challenges of facial herpes simplex virus infection. J Antimicrob Chemother 2001; 47 (suppl T1): 17–27.
5. Corella Sanchez, R. & Reyes Diaz, J. M. Primary herpetic gingivostomatitis in a group of children. Rev. Cubana Estomatol., 25:55-64, 1988.
6. Dohvoma, C. N. Primary herpetic gingivostomatitis with multiple herpetic whitlows. Br. Dent. J., 177:251-2, 1994.

# CASE REPORT

- Gandara-Rey, J. M.; Pacheco-Martins, J. L.; Gandara- Vila, P.; Blanco-Carrion, A. & Garcia-Garcia, A. Primary herpetic gingivostomatitis in a 65-year-old patient. *Med. Oral*, 7:180-3, 2002.
- Chandrasekar, P. H. Identification and treatment of herpes lesions. *Adv. Wound Care*, 12:254-62, 1999.
- Scully C. Orofacial herpes simplex virus infections: Current concepts in the epidemiology, pathogenesis, and treatment, and disorders in which the virus may be implicated. *Oral Surg Oral Med Oral Pathol* 1989; 68:701–710.
- Regezi JA, Sciubba JJ. *Oral Pathology—Clinical Pathologic Correlations*, ed 4. Philadelphia: Saunders, 2003:1–6.
- Smith JS, Robinson NJ. Age-specific prevalence of infection with herpes simplex virus types 2 and 1: A global review. *J Infect Dis* 2002;186 (suppl 1):S3–28.
- Amir J, Harel L, Smetana Z, Varsano I. The natural history of primary herpes simplex type 1 gingivostomatitis in children. *Pediatr Dermatol* 1999; 16: 259–263.
- Aksamit AJ. Herpes simplex encephalitis in adults and older children. *Curr Treat Options Neurol* 2005; 7: 145–150.
- Kolokotronis A, Dumas S. Herpes simplex virus infection, with particular reference to the progression and complications of primary herpetic ingivostomatitis. *Clin Microbiol Infect* 2006; 12: 202–211.
- Lawall, M. A.; Almeida, J. F. A.; Bosco, J. M. D. & Bosco, A. Primary herpetic gingivostomatitis in adult: case report. *Revista Odonto. Ciência*, 20:191-4, 2005.
- MacPhail, L. & Greenspan, D. Herpetic gingivostomatitis in a 70-year-old man. *Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod*, 79:50-2, 1995.

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