Journal of Pakistan Association of Dermatologists. 2023;**33(3)**:1183-1184.

Case Report

Aphthous ulcer associated with Covid-19

Daniel Henry, Chirag Agrawal*

Department of Dermatology, Usha Memorial Skin And Eye Hospital, Bilaspur-Chhattisgarh, India.
* Nalanda Medical College, Bihar, India.

Abstract The mouth plays an important role in the transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) owing to the fact that both the tongue and salivary glands are conducive environments for the storage and spread of the virus. Various oral lesions have now found to be associated with Covid-19. We are going to present a case of a 53 year old diabetic female who developed oral ulcer 4 days after getting a covid positive report.

Key words
Aphthous ulcer; Covid 19.

Introduction

Mutation in Covid19 virus has added many new symptoms which were not known to us earlier. The oral lesions are now being understood as a major manifestation of Covid 19.

SARS-CoV-2 binds to the angiotensin-converting enzyme 2 (ACE2) receptor, which is detected in the cell membrane of numerous human organs and tissues, including the lungs, kidneys, liver, epithelial cells of the tongue and salivary glands, upper respiratory tract, nervous system, and skeletal muscle, among others.[1-4]

SARS-CoV-2 can be detected in saliva and oropharyngeal secretions,[5] little is known about the routes of transmission through the oral mucosa. Keeping the rarity of the case in mind We are presenting a case of 53 year old lady with oral manifestation of Covid 19.

Case report

A 53 year old female consulted us through teledermatology for oral ulceration since 4 days. On taking history the patient told us that she got Covid positive 4 days ago (RT-PCR) was done. Patient had no symptoms of Covid 19 apart from loss of taste and smell.

Patient is also a known diabetic. All blood investigations were within normal limits. Only D Dimer was 772 ng/ml. On cutaneous examination focal erythema with ulceration was seen on the anterior aspect of the hard palate **(Figure 1)**.The diagnosis of Aphthous ulcer was made after clinical evaluation.

Antibiotics and topical Triamcinolone acetonide was given as treatment for oral ulceration.

Discussion

According to a study, the oral manifestations appeared concomitant with the loss of taste and smell. The oral lesions were more severe and widespread in older patients with more severe Covid-19 infection.[6] Aphthous-like ulcers can be associated with mild cases of Covid-19. The numerous signs and symptoms that have been associated with Covid-19 include dysgeusia and anosmia even in the absence of respiratory

Address for correspondence
Dr. Daniel Henry (MBBS,MD)
Consultant Dermatologist
Usha memorial Skin and Eye Hospital,
Bilaspur-Chhattisgarh, India.
Email: danielhenry21@yahoo.com

Figure 1.focal erythema with ulceration can be seen on anterior aspect of the, hard palate.

symptoms. ACE2-expressing epithelial cells of the tongue and of the salivary glands may be susceptible to SARS-CoV-2 infection. To our knowledge this will be the first case to be reported in India. New etiopathogenic mechanism between ACE2 and SARS-CoV-2 may exist in the oral cavity.[6]

Conclusion

Oral cavity lesions were once neglected but now it has been found that oral lesions might be associated with Covid-19. Dermatologists and dentist examining oral cavity should be extra careful especially where there is loss of taste and smell sensation.

References

1. Sungnak W., Huang N., Bécavin C. SARS-CoV-2 entry factors are highly expressed in nasal epithelial cells together with innate immune genes. *Nat Med*. 2020;**26**:681-7.
2. Xu H., Zhong L., Deng J. High expression of ACE2 receptor of 2019-nCoV on the epithelial cells of oral mucosa. *Int J Oral Sci*. 2020;**12**:8.
3. Xu J., Li Y., Gan F., Du Y., Yao Y. Salivary glands: potential reservoirs for COVID-19 asymptomatic infection. *J Dent Res*. 2020;**99**:989.
4. Zou X., Chen K., Zou J., Han P., Hao J., Han Z. Single-cell RNA-seq data analysis on the receptor ACE2 expression reveals the potential risk of different human organs vulnerable to 2019-nCoV infection. *Front Med*. 2020;**14**:185-92.
5. Xu R., Cui B., Duan X., Zhang P., Zhou X., Yuan Q. Saliva: potential diagnostic value and transmission of 2019-nCoV. *Int J Oral Sci*. 2020;**12**:11.
6. Brandão TB, Gueiros LA, Melo TS, *et al*. Oral lesions in patients with SARS-CoV-2 infection: could the oral cavity be a target organ?. *Oral Surg Oral Med Oral Pathol Oral Radiol*. 2021;**131(2)**:e45-e51. doi:10.1016/j.oooo.2020.07.014.