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Erythema multiforme: A case report with oral manifestations

Gabriela Reganin Monteiro, Gabriela Máximo, Maria Clara Ferreira Coelho, Felipe da Silva Peralta, Dárcio Kitakawa, Luis Felipe das Chagas e Silva de Carvalho

ABSTRACT

Introduction: Erythema multiforme (EM) is an acute, immune-mediated mucocutaneous disease, which may be related to herpes simplex virus, use of certain medications, autoimmune disease, radiation, immunization, pregnancy, period, and food additives or chemicals. It is a condition that occurs predominantly in young adults, with a slight female preponderance and no predilection. Clinically, EM presents erosive and erythematous plaques, affecting mainly the lips and oral mucosa, called target lesions, which may progress to vesiculobullous lesions. The aim of this study is to report a case shown as a positive response to treatment.

Case Report: This is a case of EM in a 50-year-old female patient with a persistent ulcer on the lower lip. The clinical presentation showed an ulcerated lesion that extended through the right labial vermilion, semi-mucosa and jugal mucosa, in addition to painful symptoms. Although the diagnostic hypothesis of EM, an incisional biopsy was performed, that confirmed the clinical diagnosis of EM. As treatment, topical use of 0.05% clobetasol propionate for 15 days was prescribed on the lesion. The patient returned in seven days with significant improvement of the site. It was decided to do only the follow-up and not to intervene with systemic corticosteroid therapy. The patient is followed up for 15 months without recurrence of the lesion. The histopathological analysis of this type of lesion is essential for the diagnosis of the lesion. In this way, we can rule out differential diagnoses, especially pemphigus vulgaris and in children, hands, feet, and mouths disease. In this work, it was observed how important the histopathological analysis is necessary in more complex cases, because in this way the therapeutic approach was effective.

Conclusion: The present case report represents how important the histopathological analysis is necessary in more complex cases to conclude the diagnosis, therefore is possible conduce the best choose of treatment for patient.

Keywords: Autoimmune disease, Corticoid therapy, Erythema multiforme, Oral manifestations

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Gabriela Reganin Monteiro[1], Gabriela Máximo[1], Maria Clara Ferreira Coelho[1], Felipe da Silva Peralta[2], Dárcio Kitakawa[3], Luis Felipe das Chagas e Silva de Carvalho[1,4]

Affiliations: [1]University of Taubaté – UNITAU, Taubaté, São Paulo, Brazil; [2]Educational University of Santa Catarina, Joinville- SC, Brazil; [3]CK Estomatologia, São Paulo, SP 04531-012, Brazil; [4]Centro Universitário Braz Cubas.

Corresponding Author: Luis Felipe das Chagas e Silva de Carvalho, Visconde do Rio Branco, 210, Centro, Curitiba, PR 80420210, Brazil; Email: luisfelipecarvalho@hotmail.com

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INTRODUCTION

The first description of this pathology was by Ferdin in 1860. In literature has a relation with a herpes virus, the term multiforme is related to a characteristic of the

diseases. Certain medications, autoimmune diseases, radiation, immunization, pregnancy, menstruation, and food or chemical additives [1, 2]. Another frequent occurrence, especially in children, is an association with the bacterium *Mycoplasma pneumoniae*.

Occurs mainly in young adults and without any predilection [1]. It is also pre-sized, which presents predominantly in the form of adults and mainly edematous distributed mainly in the extremities of the body and EM if larger and more multiform in the form of raised edematous papules, but distributed in the extremities of the body, but the involvement of one or more mucous membranes, less than the involvement of the total body surface area. The occurrence of Stevens-Johnson is related to detachment, in contrast to an index below [3].

Erythema multiforme can be divided into mucosa multiforme EM which does not involve EM of the greater mucosa [4]. Clinically, EM presents erythematous plaques affecting mainly and oral, called target deficiencies, and may progress to vesiculobullous [4–6].

CASE REPORT

A female patient, 50-year-old, persistent by otorhinolaryngology for evaluation of lower lip consultation. The clinical presentation showed an ulcerated lesion that extended through the semimucosa and buccal mucosa (Figure 1). She referred an intense pain and can't eat because of the mouth lesions. The patient had no injuries. With the diagnostic hypothesis of EM, we recommend performing an incisional biopsy that confirmed the clinical diagnosis of EM (Figure 2).

As treatment, topical use of 0.05% clobetasol propionate for 15 days was prescribed on the lesion. The patient returned within seven days with significant improvement in the area (Figure 3). We were decided to follow up and not intervene with systemic corticosteroid therapy. The patient is followed up for 15 months without recurrence of the lesion.

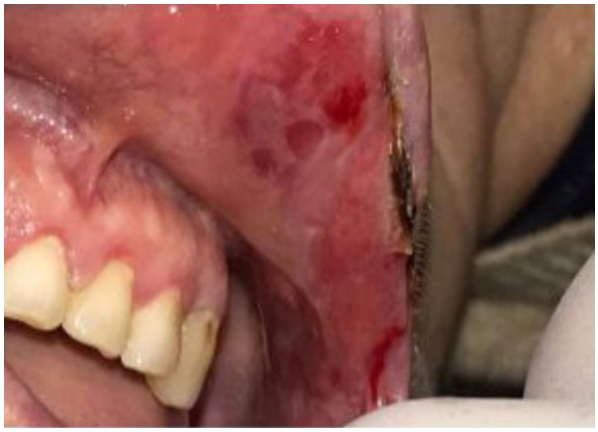

Figure 1: The semimucosa and buccal mucosa with ulcerated regions and erythematous area.

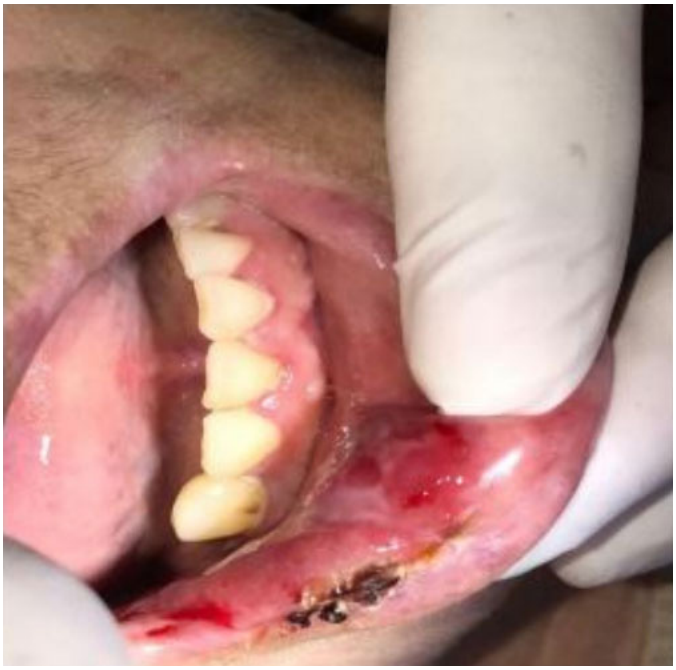

Figure 2: Region where the biopsy was performed.

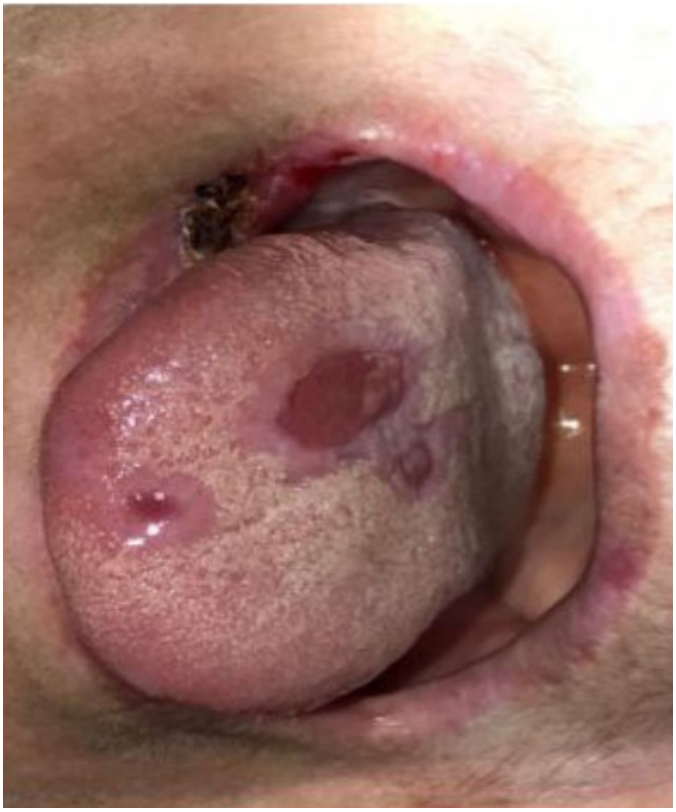

Figure 3: After 15 days of treatment with local corticosteroids.

Histopathology

The histopathological analysis of this type of lesion is essential for the diagnosis of the lesion. In this case, the disease is mainly from foot and mouth in children to rule out diagnoses and pemphigus vulgaris. In the slide

of the case in question, it was possible to observe and not observe spongiosis presence of intraepithelial cleft, in the tissue there may be an inflammatory infiltrate with the presence of neutrophils and plasma cells (Figure 4).

One of the characteristics that the type of lesion presents is neovascularization, which is present in the connective region just below the epithelium.

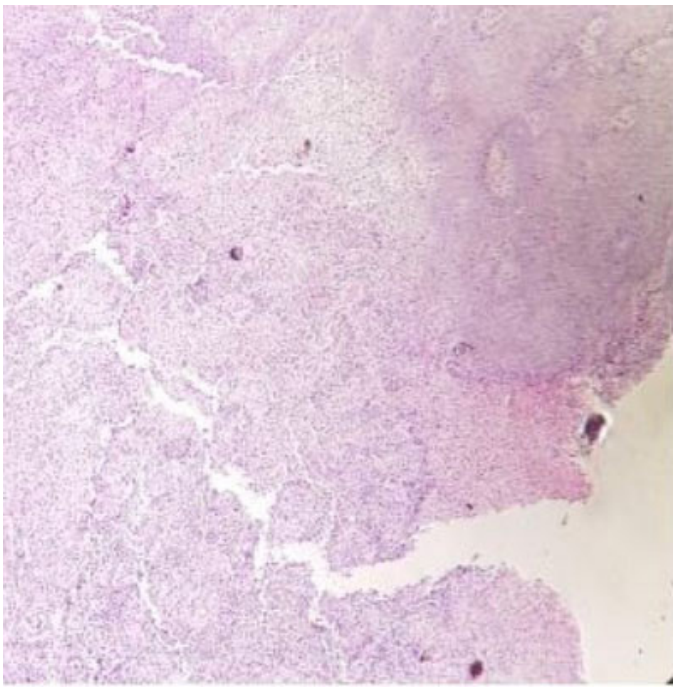

Figure 4: Presence of epithelium with spongiosis presence of intraepithelial cleft, in the tissue there may be an inflammatory infiltrate with the presence of neutrophils and plasma cells.

DISCUSSION

Erythema multiforme is a difficult pathology to diagnose and there are few reports in the literature about it. It is an acute inflammatory reaction, related to an immune system response, which can generate hypersensitivity, which is affected. In this case report, the lesion presents with clinical manifestations that affect the skin and mucosa, especially the perioral region. In the literature, this type of symptom can be announced as mild, moderate or severe, related to EM minor.

The mechanisms that describe the pathogenesis of EM have been linked in investigational studies to the herpes simplex virus (V) [2]. However, there are some specific cases in the literature that do not have a specific cause determined, that is, an association with and an association with specific conditions in the multiform literature [7].

Even though the pathogenesis is unknown, there is a tendency to consider minor and major EM as part of a spectrum that is most often identified by infection-John and separate epidermal necrosis most often provoked by drugs with EM major and SJS representing a bridge in the continuum of IN. There are significant differences between minor EM, major SJS EM, and about the severity of their clinical expression, but all variants of combination of two main characteristics in common, simple, or less typical formulas of target deficiency and satellite cell necrosis, mainly not epithelium [3].

As they usually occur in 3–5 days of resolution and disappear the lesions, in more severe cases, may occur in weeks [2, 8]. For some authors, complete and spontaneous resolution may take five weeks [8]. Recurrent episodes of disease may occur, on average, six times a year, lasting from six to ten years [8, 9]. Treatments for EM according to regions the degree of disease in each patient, as there is no specific therapeutic treatment [4].

The treatments used in this type of case vary between the profile of choice of Shah et al. [9] in mild cases, the use of mouthwash should be recommended, and the diet should be soft and liquid. In moderate or severe cases, erythema multiforme (EM) can be treated with oral corticosteroids or in the form of a solution as a mouthwash in patients without contraindication for a short period, topically, orally, or intravenously [4, 9]. Immunosuppressive drugs such as Dapsone, Azathioprine is showing good results in the regression of the disease [9]. For pediatric patients with suspected herpes simplex, the prescription of Acyclovir is recommended. The use of systemic corticosteroids in the treatment of EM remains controversial, which is why there is still a debate about the administration of these drugs, despite the recommendation for severe cases [10, 11].

According to the histopathology of the established lesions being characterized by dermatitis of vacuolar interface with basocellular degeneration and epidermal dysceratosis. Another main characteristic independent of localization is the presence of superficial perivascular lymphocytic infiltrate with rare eosinophils or neutrophils. Therefore, the administration of corticosteroids is the most widely used drugs in the treatment containing the acute symptomatology of the case [1, 12, 13].

CONCLUSION

The present case report represents how important the histopathological analysis is necessary in more complex cases to conclude the diagnosis, because in this way the therapeutic approach will be effective. In patients with this type of diagnosis, clinical follow-up is extremely necessary, in order to verify if the cause of the injury was treated and properly solved.

REFERENCES

1. Krishnankutty K, Chaudhuri K, Ashok L. Erythema multiforme: A case series and review of literature. Open Access J Trans Med Res 2018;2(4):124–30.

2. Sokumbi O, Wetter DA. Clinical features, diagnosis, and treatment of erythema multiforme: A review for the practicing dermatologist. Int J Dermatol 2012;51(8):889–902.
3. Rakhi I, Prabhu N. Etiopathogenesis of erythema multiforme – A concise review. Adv Dent & Oral Health 2017;5(4):555669.
4. Sanchis JM, Bagán JV, Gavaldá C, Murillo J, Diaz JM. Erythema multiforme: Diagnosis, clinical manifestations and treatment in a retrospective study of 22 patients. J Oral Pathol Med 2010;39(10):747–52.
5. Kohli PS, Kaur J. Erythema multiforme-oral variant: Case report and review of literature. Indian J Otolaryngol Head Neck Surg 2011;63(Suppl 1):9–12.
6. Rul G, Marcon M, De Carli JP, Linden MSS, da Silva SO. Incomum caso de eritema multiforme. Revista Da Faculdade De Odontologia - UPF 2016;21(1):96–101.
7. Lerch M, Mainetti C, Terziroli Beretta-Piccoli B, Harr T. Current perspectives on erythema multiforme. Clin Rev Allergy Immunol 2018;54(1):177–84.
8. Paulino L, Hamblin DJ, Osondu N, Amini R. Variants of erythema multiforme: A case report and literature review. Cureus 2018;10(10):e3459.
9. Shah SN, Chauhan GR, Manjunatha BS, Manjunatha BS, Dagrus K. Drug induced erythema multiforme: Two case series with review of literature. J Clin Diagn Res 2014;8(9):ZH01–4.
10. Katz J, Livneh A, Shemer J, Danon YL, Peretz B. Herpes simplex-associated erythema multiforme (HAEM): A clinical therapeutic dilemma. Pediatr Dent 1999;21(6):359–62.
11. Zoghaib S, Kechichian E, Souaid K, Soutou B, Helou J, Tomb R. Triggers, clinical manifestations, and management of pediatric erythema multiforme: A systematic review. J Am Acad Dermatol 2019;81(3):813–22.
12. Vissing MB, Bhasin A, Sluzevich J. The role and histopathology of oral drug challenge in the evaluation of fixed drug eruptions. J Cutan Immunol Allergy 2021;4(5):120–2.
13. Soares A, Sokumbi O. Recent updates in the treatment of erythema multiforme. Medicina (Kaunas) 2021;57(9):921.

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Author Contributions

Gabriela Reganin Monteiro – Conception of the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Gabriela Máximo – Conception of the work, Design of the work, Acquisition of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Maria Clara Ferreira Coelho – Conception of the work, Design of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Felipe da Silva Peralta – Conception of the work, Design of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Dárcio Kitakawa – Conception of the work, Design of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Luis Felipe das Chagas e Silva de Carvalho – Conception of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Guarantor of Submission

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Written informed consent was obtained from the patient for publication of this article.

Conflict of Interest

Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.