

Extended Abstract

Methotrexate-induced Plasma Cell Mucositis: A Case Report of a Previous Undescribed Correlation [†]

Alessandro d'Aiuto ^{1,*}, Maria Pellilli ², Marta Dani ¹, Fabio Croveri ¹, Andrea Boggio ¹, Vittorio Maurino ¹ and Lorenzo Azzi ¹

¹ Department of Medicine and Surgery, University of Insubria, ASST Sette Laghi, Dental clinic, Unit of Oral Medicine and Pathology, 21100 Varese, Italy; marta.dani92.md@gmail.com (M.D.); fabio.croveri@icloud.com (F.C.); daiuto.alessandro1992@gmail.com (A.B.); vittorio.maurino@gmail.com (V.M.); lorenzoazzi86@hotmail.com (L.A.)

² Department of Medicine and Surgery, University of Insubria, ASST Sette Laghi, Unit of Pathology, 21100 Varese, Italy; maria.pellilli@yahoo.it

* Correspondence: daiuto.alex@gmail.com; Tel.: +39-0332825623

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1. Case Presentation

An 85-year-old man was referred at our Oral Medicine Unit for the presence of painful, multiple ulcerative lesions in the mouth.

The patient reported the onset of the lesions several weeks before, and he was unable to eat or drink normally, thus being hospitalized due to electrolyte imbalance.

Clinically, multiple ulcerative lesions were observed bilaterally on the buccal mucosa and also on the left soft palate (Figure 1). In addition, mild angular cheilitis-like fissures were observed on the lips. Neither the oropharyngeal and the upper aero-digestive districts nor the skin showed any other lesions.

The patient's anamnesis reported the presence of Rheumatoid arthritis, treated with methotrexate (15 mg IM weekly).

Differential diagnosis included oral blistering diseases, chronic ulcerative stomatitis, methotrexate-induced ulceration, methotrexate-induced lymphoproliferative disorder, chronic granulomatous conditions, endocrinal or nutritional alterations.

An incisional biopsy of the affected area was performed, along with DIF analysis, to confirm or rule out several autoimmune blistering disorders. The lesions healed after methotrexate was discontinued and topical corticosteroid therapy was started.



Figure 1. (a,b) Clinical aspect of the lesions. Multiple ulcerations with perilesional velvety, sometimes cobblestone-looking, inflamed mucosa.

2. Histopathology

The histopathological examination revealed the presence of a chronic deep inflammatory infiltrate, completely composed of plasma cells, a feature that was confirmed by immunohistochemical analysis with CD138 (Figure 2). The infiltrate was polyclonal, with the production of both lambda and kappa chains, excluding thus any lymphoproliferative disorder or plasmacytoma.

In situ hybridization for detecting the presence of EBV infection provided negative results.

The final diagnosis was Plasma Cell Mucositis (PCM) [1]. Occasional relapses are managed with clobetasol ointment 0.05%.

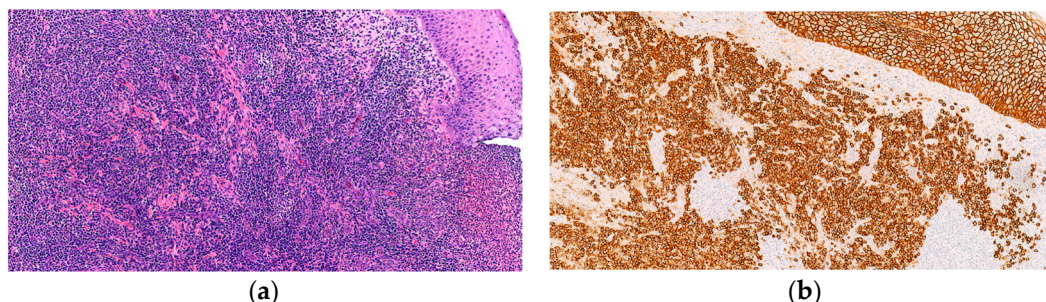


Figure 2. Histopathological features of PCM. (a) H&E stain revealed the presence of a subepithelial inflammatory infiltrate composed completely by plasma cells. (b) Immunohistochemical analysis with CD138 confirmed the prevalence of the plasma cells within the inflammatory infiltrate.

3. Conclusions

PCM is a very rare immunological disorder of the upper aerodigestive tract that can affect the oral cavity [2]. This case report is the first one that describes the onset of PCM associated to Methotrexate therapy, thus different from Methotrexate-induced mucocutaneous ulcer [3].

Conflicts of Interest: The authors declare no conflict of interest.

References

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