Oral amoebiasis with acute myeloblastic leukemia

Eiji Mitate, Kazunari Oobu, Tamotsu Kiyoshima, Seiji Nakamura

ABSTRACT

Abstract is not required for Letter to Editor
Oral amoebiasis with acute myeloblastic leukemia

Eiji Mitate, Kazunari Oobu, Tamotsu Kiyoshima, Seiji Nakamura

To the Editors,

Oral manifestations are frequent seen in immunocompromised patients. In some cases, *Entamoeba gingivalis*, was isolated and described by Gros G. [1], is found in periodontal disease [2], under chemotherapy [3], HIV(+)/AIDS patients [4] and acute osteomyelitis [5]. To our knowledge, this is the first case report of oral amoebiasis in immunocompromised patients with acute myeloblastic leukemia (AML). A 63-year-old male had painful refractory palatal and lower gingival ulcers (Figure 1A–B). Each ulcer was filled with necrotic tissue and had a 5-mm induration. Some large and enhanced cervical lymph nodes were detected on computed tomography (Figure C) scan. Brush cytological examination revealed oral amoebiasis without malignancy (Figure D). Vitamin B12 and folic acid were administrated for anemia. Blood examination revealed the following values: white blood cells 990/μl, red blood cells 1.32x10^6/μl; and hemoglobin 4.8 g/dl, with higher hemoglobin F level. The patient was referred to the hematology department, where he was diagnosed as having AML (M2) after bone marrow biopsy. Remission induction treatment (idarubicin hydrochloride and cytarabine) was initiated. Aspergillus pneumonia, bacteremia in trichosporonosis, and tuberculous cervical lymphadenitis were also treated. After two months of remission, agranulocytosis and recurring AML were detected. During chemotherapy for AML, the patient died of trichosporonosis-related pneumonia. *E. gingivalis* is rare in healthy gingival pockets [5]. The presence of *E. gingivalis* may suggest some immune deficiency. In this case, detection of *E. gingivalis* by brush cytology and blood examination revealed immune deficiency. If malignancy or immune deficiency is expected, these two methods are considerable in early stage.

**Keywords:** Acute myeloblastic leukemia, *Entamoeba gingivalis*, Immunocompromised, Oral amoebiasis

---

**Figure 1:** Oral ulcers are seen in lower gingiva (A) and palate (B) at first visit, (C) Cervical lymph nodes with rim enhance are seen (C, arrowheads) in computed tomography, (D) Brush cytological examination of ulcers showing amoebiasis.
Mitate E, Oobu K, Kiyoshima T, Nakamura S. Oral amoebiasis with acute myeloblastic leukemia. Int J Case Rep Images 2016;7(7):486–487.

Article ID: Z01201607LE10018LM

doi:10.5348/ijcri-201602-LE-10018

Author Contributions
Eiji Mitate – Substantial contributions to conception and design, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published
Kazunari Oobu – Substantial contributions to conception and design, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published
Tamotsu Kiyoshima – Substantial contributions to conception and design, Revising it critically for important intellectual content, Final approval of the version to be published
Seiji Nakamura – Substantial contributions to conception and design, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor
The corresponding author is the guarantor of submission.

Conflict of Interest
Authors declare no conflict of interest.

Copyright
© 2016 Eiji Mitate et al. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.

REFERENCES
1. Gros G. Fragments d'helminthologie et de physiologie microscopique. Bull Soc Imp Nat Moscou 1849;22: 549–73.
2. Linke HA, Gannon JT, Obin JN. Clinical survey of Entamoeba gingivalis by multiple sampling in patients with advanced periodontal disease. Int J Parasitol 1989 Nov;19(7):803–8.
3. el Azzouni MZ, el Badry AM. Frequency of Entamoeba gingivalis among periodontal and patients under chemotherapy. J Egypt Soc Parasitol 1994 Dec;24(3):649–55.
4. Lucht E, Evengård B, Skott J, Pehrson P, Nord CE. Entamoeba gingivalis in human immunodeficiency virus type 1-infected patients with periodontal disease. Clin Infect Dis 1998 Sep;27(3):471–3.
5. Bhaijee F, Bell D. Entamoeba gingivalis in Acute Osteomyelitis of the Mandible. Case Rep Med 2011;2011:357301.
Edorium Journals: An introduction

Edorium Journals Team

About Edorium Journals
Edorium Journals is a publisher of high-quality, open access, international scholarly journals covering subjects in basic sciences and clinical specialties and subspecialties.

Invitation for article submission
We sincerely invite you to submit your valuable research for publication to Edorium Journals.

But why should you publish with Edorium Journals?
In less than 10 words - we give you what no one does.

Vision of being the best
We have the vision of making our journals the best and the most authoritative journals in their respective specialties. We are working towards this goal every day of every week of every month of every year.

Exceptional services
We care for you, your work and your time. Our efficient, personalized and courteous services are a testimony to this.

Editorial Review
All manuscripts submitted to Edorium Journals undergo pre-processing review, first editorial review, peer review, second editorial review and finally third editorial review.

Peer Review
All manuscripts submitted to Edorium Journals undergo anonymous, double-blind, external peer review.

Early View version
Early View version of your manuscript will be published in the journal within 72 hours of final acceptance.

Manuscript status
From submission to publication of your article you will get regular updates (minimum six times) about status of your manuscripts directly in your email.

Our Commitment

Six weeks
You will get first decision on your manuscript within six weeks (42 days) of submission. If we fail to honor this by even one day, we will publish your manuscript free of charge.*

Four weeks
After we receive page proofs, your manuscript will be published in the journal within four weeks (31 days). If we fail to honor this by even one day, we will publish your manuscript free of charge and refund you the full article publication charges you paid for your manuscript.*

Favored Author program
One email is all it takes to become our favored author. You will not only get fee waivers but also get information and insights about scholarly publishing.

Institutional Membership program
Join our Institutional Memberships program and help scholars from your institute make their research accessible to all and save thousands of dollars in fees make their research accessible to all.

Our presence
We have some of the best designed publication formats. Our websites are very user friendly and enable you to do your work very easily with no hassle.

Something more...
We request you to have a look at our website to know more about us and our services.

* Terms and condition apply. Please see Edorium Journals website for more information.

We welcome you to interact with us, share with us, join us and of course publish with us.