

Primljen / Received on: 12.12.2021.  
Revidiran / Revised on: 30.12.2021.  
Prihvaćen / Accepted on: 15.01.2022.

PREGLEDNI RAD  
REVIEW ARTICLE  
doi: 10.5937/asn2285352M

# MEDICINSKI ZNAČAJ PROTOZOA USNE DUPLJE U STOMATOLOŠKOJ PRAKSI

## ORAL CAVITY PROTOZOA RELEVANT IN THE PRACTICE OF DENTISTRY

Nataša L. Miladinović-Tasić<sup>1,2</sup>, Katarina Z. Nikolić<sup>3</sup>, Kristina G. Arizanović<sup>3</sup>

<sup>1,2</sup> UNIVERZITET U NIŠU, MEDICINSKI FAKULTET, KATEDRA MIKROBIOLOGIJA I IMUNOLOGIJA, NIŠ, SRBIJA

<sup>2</sup> INSTITUT ZA JAVNO ZDRAVLJE NIŠ, NIŠ, SRBIJA

<sup>3</sup> UNIVERZITET U NIŠU, MEDICINSKI FAKULTET, NIŠ, SRBIJA, STUDENT DOKTORSKIH STUDIJA

<sup>1</sup> UNIVERSITY OF NIŠ FACULTY OF MEDICINE, DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY, NIŠ, SERBIA

<sup>2</sup> PUBLIC HEALTH INSTITUTE, NIŠ, SERBIA

<sup>3</sup> UNIVERSITY OF NIŠ FACULTY OF MEDICINE, NIŠ, SERBIA, PHD STUDENT

### Sažetak

**Uvod:** Usna duplja čoveka je mesto za kolonizaciju najraznovrsnijih mikroorganizama u organizmu ljudi. Brojni faktori mogu uticati na homeostazu oralnog mikrobioma. Parodontalne bolesti nastaju usled poremećene homeostaze oralnog mikrobioma i odbrane domaćina, kada dolazi do inflamatorne reakcije, koja zahvata tkivo parodontijuma. Uticaj parazita na patofiziologiju parodontijuma još uvek nije dovoljno proučen, pa bi sadašnja i naredna naučna istraživanja trebalo da daju brojne odgovore.

**Cilj rada:** U svetlu sadašnjih saznanja vezanih za patogenezu, dijagnostiku i epidemiologiju infekcija oralne duplje uzrokovanih vrstama protozoa *Entamoeba gingivalis* i *Trichomonas*, cilj rada je da se kroz pregled literature ukaže na značaj protozoa u stomatološkoj praksi, kao i na moguće manifestacije parazitskih infekcija od značaja za javno zdravlje, koje se mogu ispoljiti i u usnoj duplji.

**Zaključak:** Stomatolozi imaju bitnu ulogu u dijagnozi oralnih oboljenja uzrokovanih protozoama usne duplje, kao i protozoa bitnih za javno zdravlje, koje daju sistemske infekcije, a patološke promene mogu se ispoljiti i u usnoj duplji. Njihovo dijagnostikovanje je svakako veliki izazov i zahteva multidisciplinarni pristup, u cilju što brže dijagnoze i adekvatnog lečenja.

**Ključne reči:** usna duplja, protozoa, parodontalne bolesti, lajšanijaza, toksoplazmoza

### Corresponding author:

Assistant prof Nataša Miladinović-Tasić, M.D, PhD  
Public Health Institute  
Dr Zorana Đinđić Blvd 50, Niš 18000  
Email: nmiltasic@yahoo.com

### Abstract

**Introduction:** Oral cavity is the colonization site of most diverse microorganisms. The homeostasis of oral microbioma is affected by numerous factors. Periodontal diseases occur as a consequence of disturbed oral microbioma homeostasis, when an inflammatory reaction occurs in the periodontal tissue. The impact of parasites on periodontal pathophysiology has not been sufficiently studied, and present and future research should hopefully answer quite a few questions concerning the issue.

**Aim of the paper:** In the light of the present knowledge of the pathogenesis, diagnosis and epidemiology of oral cavity infections caused by *Entamoeba gingivalis* and *Trichomonas tenax*, the aim of the paper was review of literature which could point to the importance of protozoa in the practice of dentistry and to possible oral cavity manifestations of parasitic infections relevant for public health.

**Conclusion:** Dentists have an essential role in the diagnosis of oral diseases caused by oral cavity protozoa, and protozoa relevant for public health that produce systemic infections, the pathological changes of which may manifest in the oral cavity. Their identification represents a challenge and requires multidisciplinary approach for a timely diagnosis and adequate management.

**Key words:** oral cavity, protozoa, periodontal diseases, leishmaniasis, toxoplasmosis

2022 Faculty of Medicine in Niš. Clinic of Dental Medicine Niš.  
All rights reserved / © 2022. Medicinski fakultet Niš. Klinika za  
dentalnu medicinu Niš. Sva prava zadržana.