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FISSURED TONGUE IN PATIENTS  
WITH RHEUMATOID ARTHRITIS

## A Rare Case

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## INTRODUCTION

This study showed the fissured tongue as an anatomical variation of the normal tongue. We decided to present this case, because, the cases with fissured tongue are rare in the population and most patients are afraid, and think that it is a serious disease. Patient has rheumatoid arthritis. The rheumatoid arthritis characterized by severe pain in the joint and muscles, fatigue, easy fever, appearance of nodules most frequently in the fingers, morning stiffness, swelling in the joints.<sup>1</sup> In this disease for the therapy are have used more drugs, analgesics for pain relief, anti-inflammatory to reduce inflammation and anti-rheumatic, many of these drugs have adverse effects on the organism. The side effects of drugs which occur in the oral cavity are mouth sores of tongue characterized as grooves with a different size. The patient has xerostomia which helps the grooving of the tongue and also the patient doesn't maintain oral hygiene resulting with inflammation of the tongue. Fissured tongue is variation of normal tongue. In this variation, the tongue has fissures on the dorsal and lateral side. Fissures can be of different size and depth: 2mm – 6mm. The condition is benign and does not cause pain. The aim of the research was to present state of fissured tongue as normal benign condition that can occur as a consequence of the rheumatoid arthritis. Fissured tongue doesn't have to worry the patients and is not life-threatening to the patient.

## CASE REPORT

A 28 year old patient presented with multiple fissures over the tongue along with foul smell since the last 3 years. From earthly history reveals that the patient prior to emerge grooves was diagnosed rheumatoid arthritis which occurs at 25 years of age of the patient. To reduce pain and inflammation and treating the rheumatoid arthritis patient was taking multiple drugs (analgesics, non-steroidal anti-inflammation drugs and disease-modifying anti-rheumatic drugs). Overloaded patients with underlying disease are not held regular oral hygiene and did not brush the tongue. No skin diseases, is not smoker and is not drinking alcohol. From familiar history reveals that

## Abstract

Fissured tongue is painless benign anatomical variation of normal tongue, when the tongue has grooves on the dorsal and lateral side. This study shows the case of a young patient who goes to an examination due to grooves on the tongue. The patient has rheumatoid arthritis and xerostomia. On the patients' tongue can be seen epithelising grooves in various sizes and depth. Besides aesthetic appearance, the patient says that he feels no pain and no other difficulties. It was found that the patient has a fissured tongue, which is a normal variation of a normal tongue. For therapy, it was given vitamin B-12, regular brushing of the tongue and rinsing the mouth with a mouth washing solution. After several months, a reduction in the grooves and the depth of the grooves was noticed.

**Key words:** fissured tongue, rheumatoid arthritis, tongue, xerostomia

in the family don't has case with fissured tongue. Subjective finding the patient has rather unaesthetic appearance of bad tongue, foul breath of the patient, no pain but has little burring sensations while eating salty and acidic foods. Upon objective findings we can see epithelising fissures on the dorsal (figure 1) and lateral side (figure 2) of the tongue. Of which the average is the largest and deepest, while the rest are smaller. They were also found dental plaque and plaque on the tongue due to irregular oral

hygiene. From the check up, subjective findings and earthly history was diagnosed fissured tongue which was probably due to reduced immunity, medicines the patient takes, the dry mouth of the patient and irregular oral hygiene of the patient. In therapeutic procedures the patient was bailed caries teeth was done mechanical removal of dental plaque with and was also done remove plaque from the tongue in order to reduce the level of microorganisms in the oral cavity of the patient. It was treated with vitamin B - 12 and the patient was advised to regularly maintain good oral hygiene and brushing tongue tree times daily and to use mount wash solution. After several mouths the patient was decreased fissure (figure 3) and did not have foul breath.



Figure 1: Fissured tongue before therapy dorsal size



Figure 2: Fissured tongue before therapy lateral size

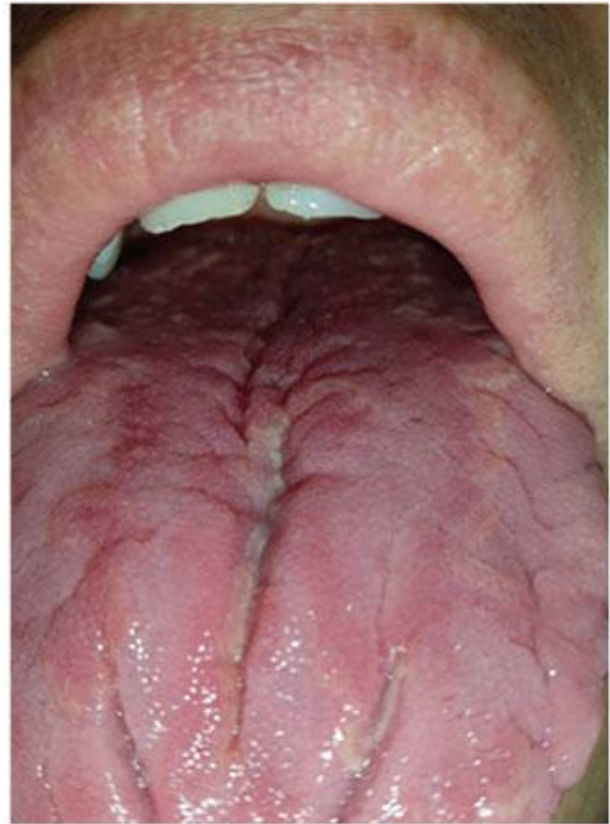


Figure 3 Fissured tongue after therapy

## DISCUSSION

Fissured tongue can appear at any time period of one's life. The study shows a 50 year old patient. Binamadi et al.<sup>2</sup> in their study they show a case of fissured tongue of a 74-year-old patient, while in his study. Lingua plicata occurs equally in male and female population. According to Darawazeh et al.<sup>3</sup> fissured tongue is the most common lesion in the tongue, 11.5% of respondents in Jordan.

Dry mouth (xerostomia) is the most common cause of fissured tongue. The patient shown in the study suffers from congenital xerostomia. Avhad<sup>4</sup> shows a 16 year how has congenital xerostomia. Nisa et al.<sup>5</sup> in their study show that the fissured tongue is caused by xerostomia, which itself is caused by radiotherapy of the head and neck.

Fissured tongue appears to be one of the most common symptoms in patients with psoriasis. Daneshpazhooh et al.<sup>6</sup> in their study show that, 66% of patients with psoriasis have fissured tongue too.

Of the 40 subjects with systemic diseases, fissured tongue occurs: 35% at patients with diabetes mellitus, 30% at patients with hypertension, 20% at patients with rheumatoid arthritis and 10% at patients with asthma.<sup>7</sup>

Donahue et al.<sup>8</sup> and Harrison et al.<sup>9</sup> indicate the fact that as side effect of the DMARDs can arise mouth sores. As a consequence of rheumatoid



arthritis may appear fissures or sores in the mouth due to reduced immunity of the patient and poor oral hygiene.<sup>10</sup> In the patient shown in the study oral manifestations reflect as fissures of the tongue in which the patient receives fissured tongue.

## CONCLUSION

From this study we can conclude that Fissured tongue is anatomical variation of normal tongue, accompanied with fissures on the tongue. Usually it occurs as a consequence of xerostomia and an inflammatory disease in which there is reduced immunity in the patient. It's not a serious disease and with good oral hygiene and hygiene on the tongue, the patient is going to continue to function normally in his environment.

## REFERENCES

1. Negrei C, Bojinca V, Balanescu A, Bojinca M, Baconi D, Spandidos DA, Tsatsakis AM, Stan M. Management of rheumatoid arthritis: Impact and risks of various therapeutic approaches. *Exp Ther Med*. 2016 Apr;11(4):1177-1183
2. Binmadi N, Jham B, Meiller T, Scheper M. A case of a deeply fissured tongue. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2010; 109(5):659-63
3. Darwazeh A, Almelaiah A. Tongue lesions in a Jordanian population. Prevalence, symptoms, subject's knowledge and treatment provided. *Med Oral Patol Oral Cir Bucal*. 2011; 16 (6):745-749.
4. AvhadG, Jerajani HR. *Lingua plicata* Indian Dermatology Online Journal 2014; 5(3):161
5. Nisa L, Giger R. *Lingua plicata*. *CMAJ*. 2012 Mar 6; 184(4):E241
6. Daneshpazhooh M, Moselehi H, Akhyani M, Etesami M. Tongue lesions in psoriasis: a controlled study *BMC Dermatology* 2004, 16:1-4.
7. Byahatti S, Ingafou M. The Prevalence of Tongue Lesions in Libyan Adult Patients. *J Clin Exp Dent*. 2010; 2(4):e163-8
8. Donahue KE, Jonas DE, Hansen RA, Roubey R, Jonas B, Lux LJ, Gartlehner G, Harden E, Wilkins T, Peravali V, Bangdiwala SI, Yuen A, Thieda P, Morgan LC, Crotty K, Desai R, Van Noord M. Drug Therapy for Rheumatoid Arthritis in Adults: An Update. Comparative Effectiveness Review No. 55. (Prepared by RTI-UNC Evidence-based Practice Center under Contract No. 290-02-0016-1.) Rockville, MD: Agency for Healthcare Research and Quality. April 2012.
9. Harrison M, Marra C, Shojania K, Bansback N. Societal preferences for rheumatoid arthritis treatments: evidence from a discrete choice experiment. *Rheumatology (Oxford)*. 2015 Oct; 54(10):1816-25
10. National Collaborating Centre for Chronic Conditions (UK). Rheumatoid Arthritis: National Clinical Guideline for Management and Treatment in Adults. London: Royal College of Physicians (UK); 2009 Feb. (NICE Clinical Guidelines, No. 79.)

## EVENT CALENDER

### FAMDENT SHOW MUMBAI-2017

Date : 26th-28th May-2017

Venue: BIEC, Goregaon(E), Mumbai

Contact No.: 9833383511

Email: famdent@gmail.com

### 9TH INTERNATIONAL CONGRESS OF ORAL IMPLANTOLOGY

Date : 2nd-4th June-2017

Venue: Le Meridien

Contact No.: 9810061862

Contact Person: Dr. Ajay Sharma

### EXPONENT CHANDIGARH

Date : Sep-2017

Contact No.: 9814012424

Contact Person: Dr. Amitabh Sachdeva

### DENTAL LAB EXPO & CONFERENCE-2018

Date : 28th-29th April-2018

Venue : Hyderabad, India

Contact Person : Mr. Manzar

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