

The prevalence of tongue lesions in the outpatients of Kementah Dental Centre

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Introduction

Tongue has been considered as a good reflection of systemic disease since Hippocrates time. In Chinese traditional medicine, tongue is examined for every patient disregard of the complaint. However, localized tongue lesions are more commonly encountered than the manifestation of systemic disease.

Objectives

There is no data regarding the prevalence of tongue lesions in Malaysian population. Therefore, the aim of this study was to assess the prevalence of tongue lesions in the outpatients of Kementah Dental Centre, Kuala Lumpur and relate the data obtained to smoking habit and medication taken.

Tongue Pathology Description

Hairy tongue	Hairy tongue is diagnosed when filiform papilla were elongated more than 3 mm (Avcu <i>et al</i> , 1999).
Coated tongue	Coated tongue is diagnosed when the dorsum surface of the tongue was covered with debris and the length of the filiform papilla was less than 3 mm (Avcu <i>et al</i> , 1999).
Fissured tongue	Fissured tongue is diagnosed when there is/are fissures in the dorsum surface of the anterior two thirds of the tongue (van Der Waal and Pindborg, 1986).
Geographic tongue	Geographic tongue is characterized by a loss of the filiform papilla in one or multiple areas of dorsum surface of tongue (Giunta, 1989).
Median rhomboid glossitis	This is referred to a rhomboid or oval shaped atrophic glossitis changes in the dorsal midline of tongue, just anterior to the foramen cecum (van Der Waal and Pindborg, 1986).
Crenation tongue	This is diagnosed when there is scalloping or crenation along the lingual periphery of the tongue (McDonald, 1974).
Ankyloglossia	This refers to the partial or complete attachment of the tongue to the floor of mouth (Giunta, 1989).

Tab. 1

Material and Methods

A total of 200 consecutive walked in patients (89 males, 112 females, aged 10-59 years, mean age 34.2) were examined during the period of July - September 2009 in Kementah Dental Centre, Kuala Lumpur. Patient with appointment was excluded from the study The oral examination was performed in a dental surgery with plain mouth mirrors under artificial light by the author.

Results

Tongue lesions was found in 90 of the 200 examined subjects with 13 (6.5%) subjects presented with more than one lesions, 4 have coated and fissured tongue; 4 with coated and crenation tongue; 2 presented with crenation tongue and partial ankyloglossia; 2 with fissured and crenation tongue, and one with fissured and partial ankyloglossia. Coated tongue was the commonest tongue lesion found with a prevalence of 45%, followed by crenation tongue (30%), partial ankyloglossia (21%), fissured tongue (18 %), geographic tongue (7%), and hairy tongue (2%). 43 (21.5%) of the subjects were smokers. Only 13 (6.5%) of the subjects were taking medications, mostly oral contraceptive pills.

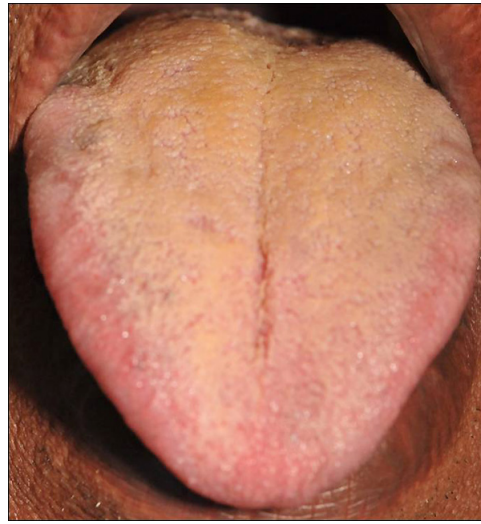


Fig. 1: Ankyloglossia

Fig. 2: Coated tongue



Fig. 3: Crenation and fissured tongue

Fig. 4: Fissured tongue



Fig. 5: Geographic tongue

Fig. 6: Normal tongue

Conclusions

The prevalence of tongue lesions in this survey is 45% with coated tongue as the commonest which in turn were seen mostly in smokers (73% of male coated tongue were smokers), as with the study of Avcu and Kanli (2003). The present study shows tongue lesion was more common in men (55% in male compared to 35% in female) which is in accordance with Avcu and Kanli's study in Turkey but in Byahatti and Ingafou's study in Libyan, both genders were almost equally affected. No specific tongue lesion was seen in patients who are taking medications due to small sample size.

Literature

1. Avcu N., Sungur A, Andac O: The comparison of therapeutic modalities and factors related with etiology of hairy tongue. *J Hacettepe Faculty Dent* (Turkish) 1999, 23, pp. 38-46.
2. van Der Waal I, Pindborg JJ: Disease of the tongue. Chicago :Quintessence, 1986, pp. 46-50.
3. Giunta JL : Developmental Abnormalities . In; Oral Pathology. B.C. Decker Inc: Toronto, 1989, pp. 43-64.
4. McDonald RE. Dentistry for the Child and Adolescent. CV Mosby Co: Saint Louis, 1974 pp. 156-161.
5. Avcu N, Kanli A. The prevalence of tongue lesions in 5150 Turkish dental outpatients. *Oral Diseases* 2003, 9, pp. 188-195.

This Poster was submitted by *Dr Mei Siang Ma.*

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Poster Faksimile:

THE PREVALENCE OF TONGUE LESIONS IN THE OUTPATIENTS OF KEMANTAH DENTAL CENTRE

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Introduction
 Tongue has been considered a good reflection of systemic disease since Hippocrates time. However, localized, non-systemic tongue lesions are much more commonly encountered.

Purpose:
 The aim of this study was to assess the prevalence of tongue lesions in the outpatients of Kemantah Dental centre and relate the data obtained to smoking habit and medication taken.

Materials and methods:
 A total of 200 walked in patients (89 males, 112 females, aged 10-59 years, mean age 34.2) were examined during the period of July – September 2009 in Kemantah Dental Centre. The oral examination was performed in a dental surgery with plain mouth mirrors under artificial light by the author.

Diagnostic Criteria:

Tongue pathology	Description
Hairy tongue	Hairy tongue was diagnosed when filiform papilla were elongated more than 3 mm. (Avcu et al, 1999)
Coated tongue	Coated tongue was made when the dorsum of the tongue was covered with debris and the length of the filiform papilla was less than 3 mm. (Avcu et al, 1999)
Fissured tongue	Fissured tongue is diagnosed when there is/are fissures in the dorsal surface of the anterior two thirds of the tongue. (van Der Waal and Pindborg, 1986)
Geographic tongue	Geographic tongue is characterized by a loss of the filiform papilla in one or multiple areas of dorsum surface of tongue. (Giunta, 1989)
Median rhomboid glossitis	This is referred to a rhomboid or oval shaped atrophic changes in the dorsal midline of tongue, just anterior to the foramen cecum. (van Der Waal and Pindborg, 1986)
Crenation tongue	This is diagnosed when there is scalloping or crenation along the lingual periphery of the tongue (McDonald, 1974)
Ankyloglossia	This refers to the partial or complete attachment of the tongue to the floor of mouth. (Giunta, 1989)

Fissured tongue

Geographic tongue

Median rhomboid glossitis

Crenation tongue

Tongue lesions was found in 90 of the 200 examined subjects with 13 (6.5%) subjects presented with more than one lesions, 4 have coated and fissured tongue; 4 with coated and crenation tongue; 2 presented with crenation tongue and partial ankyloglossia; 2 with fissured and crenation tongue, and one with fissured and partial ankyloglossia. Coated tongue was the commonest tongue lesion found with a prevalence of 45%, followed by crenation tongue (30%), partial ankyloglossia (21%), fissured tongue (18 %), geographic tongue (7%), and hairy tongue (2%). 43 (21.5%) of the subjects were smokers. Only 13 (6.5%) of the subjects were taking medications, mostly oral contraceptive pills.

Hairy tongue

Normal tongue

Conclusions:
 The prevalence of tongue lesions in this survey is 45% with coated tongue as the commonest which in turn were seen mostly in smokers (73% of male coated tongue were smokers). In this study, tongue lesion was more common in men (55% in male compared to 35% in female). No specific tongue lesion was seen in patients who are taking medications due to small sample size.

References:
 Avcu N, Avcu F, Beyen C et al. The relationship between gastrin-oral Helicobacter pylori and oral hygiene in patients with vitamin B12-deficiency anemia. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2001; 92, pp. 586-590.
 van Der Waal I, Pindborg JJ. *Diseases of the tongue*. Chicago: Quintessence, 1986, pp. 46-50.
 Giunta J. *Developmental Abnormalities*. In: *Oral Pathology*. 8.C. Decker Inc; Toronto, 1989, pp. 43-64.
 McDonald RE. (1974). *Dentistry for the Child and Adolescent*. CV Mosby Co; Saint Louis, 1974 pp. 156-181.
 Avcu N, Kamil A (2003). The prevalence of tongue lesions in 1150 Turkish dental outpatients. *Oral Diseases* 2003, 9, pp. 188-195.
 Varga-Szilag T., Vincze N., Benoczy L.: Prevalence of tongue lesions in Hungarian children. *Oral Diseases*, 2003, 9, pp. 98-97.

Coated tongue

Ankyloglossia