

# ORAL MANIFESTATIONS PRESENTED BY PATIENTES ATTENDED AT STOMATOLOGY CLINIC OF THE UNIVERSITY OF SOUTHERN SANTA CATARINA

## ABSTRACT

**AIM:** Determining the prevalence of oral manifestations in patients treated at the Stomatology Clinic of the University of Southern Santa Catarina (UNISUL). **MATERIAL AND METHODS:** It consisted of a retrospective study conducted in 2014, with 145 medical records of patients seen at the Stomatology clinic in the period of 2010 to 2014. Through a survey form prepared by the authors the normal variations, oral lesions, biopsies performed, histopathologic diagnoses and the correlation between clinical and histopathological diagnoses were registered. **RESULTS:** The data was then organized in a spreadsheet and descriptively analyzed by simple occurrence counting. Of the 145 records analyzed, 57 were from men and 88 were from women. Their age ranged between 12 and 76 years, with an average age of 47 years and eight months. Among the normal variations, the Fordyce granules were observed in 20.59% (34). The fibrous hyperplasia were the pathology most frequent, 23, 5% (20). The total number of biopsies was 35, and the correlation between the clinical and histological diagnoses was 65.71% (23), in particular for inflammatory fibrous hyperplasia and leukoplakia. **CONCLUSIONS:** The main variation of normality was the Fordyce beads while the inflammatory fibrous hyperplasia was the main pathology diagnosed.

DE MEDEIROS, Gláucia Helena Faraco\*  
BOSCATO, Ricardo Mickielin\*

## KEYWORDS

Oral medicine. Mouth diseases. Diagnosis. Hyperplasia.

## INTRODUCTION

Buccal cavity may present a variety of possible conditions. Among them the normal changes or benign or malignant ones, which can be observed by the own patient or through physical intra-buccal examination<sup>1-4</sup>.

Independently on the nature of the pathological changes, a correct diagnosis is necessary for a successful treatment. From differential diagnosis based on common characteristics among different pathologies, the professional can obtain a definite diagnosis by information obtained from the clinical trial or by association with complementary tests, like images or biopsies<sup>4-8</sup>.

The search for information from the patient in order to face cases or obtain a result from epidemiological survey occurs from the data of the patient's record, as well as his clinical documents, including odontogram, complementary tests and anamnesis; these data are paramount for the treatment in order to achieve the success<sup>9-10</sup>.

The knowledge on the prevalence of these conditions allows better understand a probable diagnosis, as well as better orientation in order to implantation or adequacy of public policies for prevention and treatment. Data like age, gender and location of lesion are important for better characterization of the disease. Brazilian continental dimension makes the coexistence of great differences, like socioeconomic, policy,

cultural, labor, racial, climate, and even several studies on the prevalence of these lesions are published, it is necessary continuous studies to verify if public policies on prevention and treatment are successful or if there is necessity of new ones and more specific measures<sup>2,4,6,11-16</sup>.

Because we understand to strength and better address the programs of public policies with views on diagnosis and treatment, as well as prevention on buccal changes, current epidemiologic surveys are necessary. This study had as aim to carry out a retrospective survey to determine the prevalence on normal changes and pathologies found in patients attended at Clinic Stomatology of University of Southern Santa Catarina (Unisul) from 2010 to 2014/A.

## MATERIAL AND METHODS

The research is characterized as a retrospective study on the records of patients attended at Clinic Stomatology of Unisul from 2010 to 2014/A. It was approved by the ethics and research committee under the number CAAE 33414114.1.0000.5369. The population of this study was composed by the totality of records of patients attended at Clinic Stomatology of Unisul in the period mentioned before, and the records which did not present enough registers on the variation of normal changes and buccal pathologies were excluded.

Data collection was performed through a form elaborated by the student and the professor advisor based on records data containing sociodemographic registers like age, gender, race, habits, systemic diseases and year of entrance at the clinical school. Data referent to the variation of normality, pathology, clinic diagnosis, biopsies and pathological diagnosis, as well as the agreement among diagnosis was also reported. After the report, data were inserted in an Excel® spreadsheet for posterior descriptive analysis by simple frequency.

## RESULTS

From 158 records of the Clinic Stomatology, 145 of them were analyzed. From them, 57 (39.1%) are male and 88 (60.9%) are female with age varying from 12 to 76 years old, and the average was 47 years old and 8 months.

Among systemic diseases, three were reported more frequently during the anamnesis: 43 patients (27.2%) reported have problems with blood pressure; diabetes mellitus was reported by 15 patients (9.5%); 51 patients (32.3%) reported have heart disease. Other types of systemic diseases were reported by 18 patients (11.4%).

Regarding to the habits, 17% were alcohol users, 63% denied the use and 20% did not answer. About smoking, 12% reported use

cigarettes, 66% denied the use, 1% reported being ex-smoker, and 21% did not answer.

From 145 records analyzed, 34 presented some type of normal change, which are disposed on the table 1.

Table 1. Normal changes.

	<b>n</b>	<b>%</b>
Stensen duct	1	2.94%
Fordyce Granules	7	20.59%
Fissured tongue	6	17.65%
Geographic tongue	2	5.88%
Alba Line	3	8.82%
Focal melanose	1	2.94%
Mordiscatum	4	11.76%
Tattoo by Amalgam	2	5.88%
Mandibular torus/Palatine	3	8.82%
Lingual varicosities	5	14.71%
<b>TOTAL</b>	<b>34</b>	<b>100%</b>

From the records analyzed, 88 indicated some pathology. The table 2 identify each one of them, where is possible observe the group with higher frequency was the fibrous hyperplasia one, with highlight to inflammatory fibrous hyperplasia by suction chamber, nine in total.

Still regarding to the buccal pathologies found, 35 had biopsies performed: 17 incisional and 18 excisional.

Pathological results of lesions by biopsies found were distributed on the table 3.

The agreement among pathological and clinical results occurred in 65.71% (23) of cases, according to the graph 1.

Buccal changes where diagnosis presented higher frequency were

inflammatory fibrous hyperplasia (11) with 55% and leukoplakia (5) with 100%.

Table 2. Clinical diagnosis.

	<b>n</b>	<b>%</b>
Stensen duct	1	2.94%
Fordyce Granules	7	20.59%
Fissured tongue	6	17.65%
Geographic tongue	2	5.88%
Alba Line	3	8.82%
Focal melanose	1	2.94%
Mordiscatum	4	11.76%
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Mandibular torus/Palatine	3	8.82%
Lingual varicosities	5	14.71%
<b>TOTAL</b>	<b>34</b>	<b>100%</b>

Table 3. Anatomopathological diagnostics.

	<b>n</b>	<b>%</b>
Carcinomas	2	5.71%
Cysts	2	5.71%
Fibroid	2	5.71%
Periapical granuloma	1	2.86%
Fordyce Granules	1	2.86%
Hemangioma	1	2.86%
Hyperplasia	11	31.43%
Leukoedema	1	2.86%
Leukoplakia	5	14.29%
lichen Plan	3	8.57%
Mucocele	2	5.71%
Actinic cheilitis	4	11.43%
<b>TOTAL</b>	<b>35</b>	<b>100%</b>

## DISCUSSION

Incomplete filling of patient's record, among them the anamnesis, physical examination or procedures performed may lead to problems of validation. Further the information for better orientation of diagnosis, they provide information for studies of prevalence and incidence<sup>9,10,16</sup>. In this study, 7.6% (12) of records were filled in incomplete way, and to avoid possible bias to the research, they were excluded.

The results found in this study on the gender distribution were contrary to those found by Ghizoni et al.<sup>3</sup> (2012), performed in the same institution, which justify predominance of male to the fact that men are concerned with health. Study performed in Turkey<sup>14</sup> also demonstrated predominance of male, and justify these differences because the frequency and the type of lesions vary according to differences of world's region. The prevalence of female can be justified by the trend of these women search dentistry attendance more frequently<sup>8,15,17</sup>. Even nowadays they search call the men's attention to the health care with male prevention campaign, it is necessary higher disclosure and orientation for men find early attendance<sup>18</sup>.

Graph 1. Concordance between diagnoses.



The results found in this research, despite indicate predominance of female gender, they show that was also considered the presence of male gender demonstrating that in Tubarão town the awareness of men for better quality of life implies on the search for dentistry attendance.

Some authors<sup>2,19,20</sup> correlate the appearance of buccal changes with alcoholism and smoking habits. Cases in which patients have these habits may influence on appearance of buccal changes, and to relate these habits with changes appearance is necessary that they were reported in the anamnesis. Despite the results of this research had identified low incidence of smoking or alcoholic patients, the cases whose diagnosis were carcinoma or leukoplakia, the patients were smokers, strengthening the importance of data on the patient's clinical record. It is known that smoking and alcohol are etiologic factors of precancerous lesions and it is very important the right orientation for the patients, especially those who present this diagnosis condition.

It is interesting highlight also the frequency of actinic cheilitis in this sample. Even the professional occupation has no considered in this work, it is known that works related to agriculture, civil building and fishing, due the constant sun exposure may develop this pathology that has high prevalence for malignant transformation<sup>21</sup>. The region of the population of this study has great number of workers in these areas, and it is important greater and better orientation of these professionals regarding to the need of lips protection, as well as early diagnosis of this pathology.

Still regarding to the prevalence of cancer lesions before benign ones, the results

of this study show low prevalence of the first ones, similar to another study<sup>7</sup>, and despite there is increase on mouth cancer cases<sup>22</sup>, many times the patients search medical attendance instead of dentistry one. It maybe can justify reduced number of lesions in both studies. Despite cancer treatment is not competence of the dentist surgeon<sup>23</sup>, identification and diagnoses are. The increment of public policies of information and awareness maybe can change these results.

The self-examination and the constant visit to the dentist increase the chances of early diagnosis of any buccal change and consequently a more effective treatment<sup>(24)</sup>. The results of this study corroborates with other ones<sup>2,5,7,8,11,12,15,16</sup> which evidenced hyperplasia. Kniest et al.<sup>12</sup> (2011), in their study, detached the presence of oral candidiasis as the second lesion more diagnosed. These clinical conditions are many times from continuous and prolonged use of poorly adapted prosthesis associated to bad buccal hygiene; when no avoid, they should be treated. Most patients attended used the same prosthesis for decades and many times they were fabricated by practiced (no licensed) where suction chamber is frequent, what confirm the prevalence of inflammatory hyperplasia by suction chamber of oral candidiasis.

Procedures of biopsies are common in situations where clinical diagnosis is not

achieved successfully and the type of biopsy depends on the lesion. This study obtained a balance between the types of biopsies performed. Contrary results with another study registered 61.9% of biopsies type incisional<sup>25</sup> or 97% of type excisional<sup>16</sup>. These results demonstrated that predominance of determined biopsies occurs because of the specification, related to the type of buccal change, its localization and the main characteristics.

Despite there was no a Kappa test to indicate a substantial agreement of results obtained in this work, it was observed that 65.71% of anatomopathological results were agreement with clinical diagnosis. Similar works also presented predominance of agreement between clinical and histopathological diagnoses, even performed by professionals or Dentistry students. Several studies<sup>4,6,16,26</sup> justify a predominance of agreement in the period of graduation by disciplines related to the area in periods anterior to the presence of specialist professors in the area who contribute for this.

The students who attend the Stomatology Clinic have already obtained contact with theoretical content in previous stages and the discipline count with two professor specialists in the area. However, the conduct of discipline is instigate the student to search identify or diagnose clinically the buccal changes observed from detailed clinical

examination. After this exposition, we believe that under-graduation students of this institution have great skills to raise a clinical diagnosis face the buccal clinical conditions presented.

## CONCLUSION

Based on the study performed is possible conclude that: (1) the more common buccal found was inflammatory fibrous hyperplasia by suction chamber; (2) Fordyce Granules were the normal change more present on buccal cavity of patients attended at the Stomatology Clinic; (3) normal changes were observed in most women, with average age of 50 years and 2 months; (4) female gender presented higher frequency of buccal changes, where the average was the age of 50 years and 2 months; (5) most patients who presented some change did not had smoking or alcohol habits; (6) inflammatory Fibrous Hyperplasia and Oral Candidiasis were the lesions more frequently found in the palate region; (7) more common lesion found by biopsies are Hyperplasia, leukoplakia and Actinic cheilitis; (8) there was predominance of agreement between clinical and histopathological diagnoses.

## ACKNOWLEDGEMENTS

To Department of Oral Pathology of Dentistry School of (FOB-USP) by performing of pathological examinations.

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