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**PREPOSITION FOR NEW CLASSIFICATION OF ORAL MUCOSAL CHANGES**

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**Abstract:** Problems relating to the classification of oral conditions, diseases and syndromes are numerous and quite complex. A classification is a process of classifying or grouping of conditions, occurrences or objects according to their common characteristics or qualities, such as classification of diseases by the common etiological, pathogenetic or therapeutic characteristics. Oral medicine and pathology participates in studying of an enormously large number of diseases, conditions and syndromes due to which their classification is really necessary and significant. Therefore it is necessary to do appropriate classification. The classification of diseases is a dynamic category, occasionally according to new findings need to be changed. Classification that can be easily understood and use and that is based on the treatment needs of patients can be considered as the most appropriate of all. Through the past there has been published a number of classification systems in oral medicine and pathology. Realizing the difficulties and disadvantages of the existing classification systems in oral medicine and pathology the main aim of this paper was established - to recommend the usage of a new classification of oral lesions and changes. By the authors of this text, a rather simple classification of the oral lesions in nine basic groups of diseases based on the nature of the disease was made. The first group consists of congenital oral conditions affecting different oral structures. The second group is formed by the variations of the normal mucous membrane, congenital conditions that usually do not require treatment. The third classification group consists of a huge number of oral lesions divided into several groups also subdivided into subgroups. The first group consists of lip lesions, the second is composed of lesions of the tongue, and the third is traumatic hyperkeratosis. The largest group here is oral infections that are subdivided according to the etiological agent of the infection. In this group are also the allergic, extravascular and reactive lesions. The fourth classification group contains precancerous, benign and malignant tumors originating from the oral cavity. The fifth classification group represents xerostomy and lesions that caused by the dry mouth. The sixth classification group contains oral pigmentations that can occur by deposition of physiological or extraoral pigments. The seventh classification group constitutes a large number of lesions that occur parallel to the skin and in the oral cavity, in this case known as oro-dermal diseases. The eighth classification group represents the group of aphthoid lesions, of which aphthous stomatitis is the most well-known disease. The ninth and last-class group covers all diseases affecting salivary glands. We think that the proposed classification of oral diseases and conditions will help those who deal with oral diseases, their diagnosis, differential diagnosis and therapy. Also this classification we hope will help for better understanding and learning of oral lesions by university students, interns, trainees and of course by dental specialists in this area. And finally we hope that this classification of oral diseases, changes and lesions will become part of everyday activities in dental offices.

**Keywords:** oral changes, classification, oral lesions, groups.

## 1. INTRODUCTION

Problems relating to the classification of oral conditions, diseases and syndromes are numerous and quite complex. A classification is a process of classifying or grouping of conditions, occurrences or objects according to their common characteristics or qualities, such as classification of diseases by the common etiological, pathogenetic or therapeutic characteristics. The classification means setting different diseases in classes, groups, subgroups in order to get “best image” of them in the multitude of phenomena. In essence, classification is basic cognitive process of setting up various phenomena or processes into classes or categories for their placement in classes or groups with similar characteristics.<sup>[9]</sup>

Oral medicine and pathology participates in studying of enormously large number of diseases, conditions and syndromes due to which their classification is really necessary and significant. Therefore there is a need for appropriate organization or appropriate classification. Classification in oral medicine and pathology is necessary for easier for understanding the situation, to make appropriate organization and to make an adequate diagnosis and plan of treatment. The classification of diseases is needed for easier communication with other scientists, practitioners or students.<sup>[6]</sup>

The classification of diseases is a dynamic category, occasionally according to new findings need to be changed. Classification that can be easily understand and use and that is based on the treatment needs of patients can be considered as the most appropriate of all. Each classification system contains certain disadvantages. Also none classification system can not be considered as definitive. Unfortunately, some researchers and clinicians find that some classification must necessarily be accepted, no matter how negative sides they have. They are not willing to accept the amendment of the classification system which they know. Most clinicians use their own terms for a long time, so that any change encounters resistance and it is hatred.<sup>[8]</sup>

Oral pathology abounds with numerous clinical entities. In the simplest cases, setting a definite diagnosis is easy and simple. But sometimes it is significantly more difficult to diagnose. Most of the classifications in oral pathology and medicine made a rough division of the changes in the oral cavity into more than two general groups.<sup>[4]</sup> Each group should contain all those diseases that resemble each other, all those diseases with common features in no particular order. In the simplest cases, which are clinically presented with simple and uncomplicated lesions, the application of different diagnostic methods result in setting definite (final) diagnosis. But such cases in oral pathology are not common, so in the everyday clinical practice we encounter conditions that are not easily resolved and require a serious approach and commitment of the clinician.

Through the past there has been published a number of classification systems in oral medicine and pathology.<sup>[1,5,7]</sup> And notwithstanding the number of classification systems, none is universally accepted nor only one used in everyday practice, clinical and scientific. The best way it is if all members of a scientific and professional community could apply the same classification and thus to mark the corresponding data. A number of different classifications are highly correlated and are largely dependent on the experience of clinicians.<sup>[2,11]</sup> Because most appropriate would be to make a reduction of classification systems, they can be simplified and can be made suitable for use in everyday dental practice.<sup>[3]</sup>

So why do we need new classification of the oral diseases? And what is the aim of this article? Realizing the difficulties and disadvantages of the existing classification systems in oral medicine and pathology the main aim of this study was established - to recommend the usage of a new classification of oral diseases and changes.

## 2. PREPOSITION FOR NEW CLASSIFICATION OF ORAL MUCOSAL CHANGES

Oral pathology and oral medicine is one of the most complex part of dental medicine and dentistry. In their range are classified a lot of different changes, diseases and syndromes that could cause a lesions of the oral mucosa.

A lot of authors in the near past were trying to make adequate classification for the oral changes. Why the classifications is so important? For very important reasons, first of all to make their studying not so difficult, for easier diagnosis, treatment plan and for their therapy. As we know some of the oral changes do not need to be cure, do not need a treatment for them. Some of them can be present long time before they even give some problem for the patients. Some of them can be lesions that become benign or malign tumors. Also a lot of the oral diseases can be just local manifestation of another general disorder or disease.<sup>[10]</sup>

By the authors of this text, a rather simple classification of the oral lesions in nine basic groups of diseases based on the nature of the disease was made. The first group consists of congenital oral conditions affecting different oral structures. The second group is formed by the variations of the normal mucous membrane, congenital conditions that usually do not require treatment. The third classification group consists of a huge number of oral lesions divided into several groups also subdivided into subgroups. The first group consists of lip lesions, the second is composed of lesions of the tongue, and the third is traumatic hyperkeratosis. The largest group here is oral infections that are subdivided according to the etiological agent of the infection. In this classification group are also the allergic, extravascular and reactive lesions. The fourth classification group contains precancerous lesions, benign and malignant tumors originating from the oral cavity. The fifth classification group represents xerostomy and lesions that are caused by the dry mouth. The sixth classification group contains oral pigmentations that can occur by deposition of physiological or extra-oral pigments. The seventh classification group constitutes a large number of lesions that occur parallel to the skin and in the oral cavity, in this case called as oro-dermal diseases. The eighth classification group represents the group of aphthoid lesions, of which recurrent aphthous stomatitis is the most well-known disease. The ninth and last-class group covers all diseases affecting salivary glands.

In the section of text that follows, this recommended new classification and oral diseases, conditions and phenomena is presented.

1. Congenital oral conditions
  - 1.1. Congenital conditions of lips
    - 1.1.1. Labia duplex
    - 1.1.2. Cheillognatoplatoashisas

- 1.1.3. Leucoedema
- 1.1.4. Morbus Bowen
- 1.1.5. Morbus Darier
- 1.1.6. White spongius nevus
- 1.2. Congenital conditions of the tongue
  - 1.2.1. Aglossia,
  - 1.2.2. Ankyloglossia,
  - 1.2.3. Lingua bifida,
  - 1.2.4. Lingua duplex
  - 1.2.5. Varices linguae
- 2. Variations of the oral mucosa
  - 2.1. Status Fordyce
  - 2.2. Hiperplasio glandulae labiorum
  - 2.3. Makroglossia,
  - 2.4. Mikroglossia
  - 2.5. Lingua plicata
  - 2.6. Lingua villosa,
  - 2.7. Lingua geographica
- 3. Oral lesions
  - 3.1. Labial changes
    - 3.1.1. Cheilitis exfoliativa sicca,
    - 3.1.2. Cheilitis exfoliativa exudativa,
    - 3.1.3. Cheilitis solaris,
    - 3.1.4. Cheilitis alergica,
    - 3.1.5. Cheilitis angularis
    - 3.1.6. Glandular cheillitis
      - 3.1.6.1. Cheilitis glandularis simplex,
      - 3.1.6.2. Cheilitis glandularis superficialis
      - 3.1.6.3. Cheilitis glandularis profunda
    - 3.1.7. Other labial changes
      - 3.1.7.1. Cheilitis granulomatosa-Micsher,
      - 3.1.7.2. Syndroma Melkerson-Rosental-Schoerman,
      - 3.1.7.3. Syndroma Acher
  - 3.2. Lessons of the tongue
    - 3.2.1. Lingua glabra
    - 3.2.2. Hipertrofie papillae lingualis
    - 3.2.3. “Hairy” tongue
  - 3.3. Traumatic hyperceratosis
  - 3.4. Oral infections
    - 3.4.1. Fungal infecions
      - 3.4.1.1. Oral candidiasis
      - 3.4.1.2. Actinomycosis
      - 3.4.1.3. Other fungal infecions
    - 3.4.2. Viral infecitions
      - 3.4.2.1. HPV infecions
        - 3.4.2.1.1. Papilloma
        - 3.4.2.1.2. Verruca vulgaris
      - 3.4.2.2. Herpes simplex infections
      - 3.4.2.3. Varicela zoster infctions
      - 3.4.2.4. Epstein bar virus infections
      - 3.4.2.5. Coxacie viral infections
      - 3.4.2.6. Oral manifestations of HIV
    - 3.4.3. Bacterial infecions
      - 3.4.3.1.1. Infectoius enentema
      - 3.4.3.1.2. Stomatitis ulcero-necroticans

- 3.4.3.1.3. Stomatitis gangrenosa-NOMA
- 3.4.3.1.4. Stretptococal infections
- 3.4.3.1.5. Stahylococal infections
- 3.4.3.1.6. Oral tuberculosis
- 3.4.3.1.7. Syphilis
- 3.4.3.1.8. Gonohorea
- 3.5. Reactive lessions
  - 3.5.1.1. Traumatic lesions
    - 3.5.1.1.1. Papillary hyperplasia
    - 3.5.1.1.2. Traumatic erythema
- 3.6. Alergic lesions
  - 3.6.1. Stomatitis protetica
  - 3.6.2. Stomatitis alergica
  - 3.6.3. Cheillitis alergica
- 3.7. Extravascular changes
  - 3.7.1. Echimosi
  - 3.7.2. Petheciae
- 4. Precancerosis, benign and malagn tumors
  - 4.1. Precancerosis
    - 4.1.1. Leucoplakia
      - 4.1.1.1. Hairy leucoplakia
    - 4.1.2. Stomattitis nicotinic
    - 4.1.3. Cheillitis solaris
  - 4.2. Benign tumors
    - 4.2.1. Haemangioms
    - 4.2.2. Lymphoms
    - 4.2.3. Erythroplakia
  - 4.3. Post- radiological changes
    - 4.3.1. Acute
    - 4.3.2. Chronic
      - 4.3.2.1. Early
      - 4.3.2.2. Late
  - 4.4. Malign tumors
    - 4.4.1. Oral cancer
    - 4.4.2. Melanoma malignum
    - 4.4.3. Kaposhi sarcoma
- 5. Xerostomia
- 6. Oral pigmentation
  - 6.1. Nicotinic melanosis
  - 6.2. Amalgam tadoo
  - 6.3. Metal intoxications
  - 6.4. Adisson disease
  - 6.5. Sclerodermia
- 7. Oral-dermal lessions
  - 7.1. Pemphigus vulgaris;
  - 7.2. Lichen planus
  - 7.3. Erithema exudativum multiforme,
  - 7.4. Lupus erithematodus
  - 7.5. Pemphigoid mucosae oris,
  - 7.6. Pemphigoid bullosus,
  - 7.7. Dermatitis herpetiformis-During,
  - 7.8. Linear IgA disease
  - 7.9. Epydermolisis hereditaria
    - 7.9.1. Simplex
    - 7.9.2. Dystrophica

8. Aphthoid lesions
  - 8.1. Stomatitis aphthosa chronica recidivans,
  - 8.2. Aphthae Bednar,
  - 8.3. Aphthoid Pospischill-Feyreter,
  - 8.4. Ulcus vulvae acutum Lipschutz;
  - 8.5. Morbus Bechet
9. Salivary disorders
  - 9.1. Obstructive lesions
    - 9.1.1. Sialolithiasis
    - 9.1.2. Mucocela
    - 9.1.3. Ranula
  - 9.2. Infective lesions
    - 9.2.1. Mumps
    - 9.2.2. Bacterial sialoadenitis
  - 9.3. Syndroms
    - 9.3.1. Syndrome Sjogren
    - 9.3.2. Morbus Mikulic

### 3. CONCLUSION

We think that the proposed classification of oral diseases and conditions will help those who deal with oral diseases, their diagnosis, differential diagnosis and therapy. Also this classification we hope will help for better understanding and learning of oral lesions by university students, interns, trainees and of course by dental specialists in this area. And finally we hope that this classification of oral diseases, changes and lesions will become part of everyday activities in dental offices.

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