



## EDITÖRE MEKTUP/LETTER TO THE EDITOR

### A simplified working classification for the soft tissue swellings of oral cavity

Oral kavitedeki yumuşak doku şişliklerinin çalışma amaçlı sadeleştirilmiş sınıflandırması

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Dear Editor,

Soft tissue structures of the oral cavity comprise of upper lip, lower lip, buccal mucosa, gingiva, alveolar mucosa, floor of mouth, tongue and soft palate<sup>1</sup>. Swellings of these structures are usually ignored by dentists unless patient complains of pain; however these swellings represent a variety of clinical entities, ranging from developmental anomalies to manifestations of different syndrome and malignant neoplasm<sup>2</sup>. There is no approved simple type working classification of soft tissue swellings of oral cavity in the literature. A simple working type classification of soft tissue swellings of oral cavity is proposed here (Table 1).

This classification includes neoplasms, Soft tissue cysts, non neoplastic salivary gland diseases, granulomatous diseases and miscellaneous diseases. Neoplasms include tumors of epithelium origin, mesenchymal origin, salivary gland origin and peripheral variants of odontogenic tumors<sup>3</sup>. Tumors of mesenchyme are further classified into common, relatively rare and rare according to their frequency of occurrence in oral cavity. Cysts of soft tissue can be a result of trapped cells as a result of inclusion error<sup>4</sup>. These cysts are usually presented as small yellow – white submucosal lesions<sup>3</sup>. Non neoplastic salivary gland diseases ranging from salivary gland cyst like mucocele to calcified masses like sialolith. Granulomatous diseases are the most commonly encountered immunodeficiencies involving the phagocyte, and are characterized by repeated infections with bacterial and fungal pathogens, as

well as the formation of granulomas in tissue<sup>5</sup>. Inside oral cavity these diseases are ranging from Sarcoidosis to tuberculosis and crohn's disease. Miscellaneous diseases comprise of unclassifiable lesions ranging from traumatic swellings to congenital malformations of veins and arteries.

Diagnosis of soft tissue swellings require a proper case history, careful intra oral examination and in some cases biopsy, aspiration cytology and other examinations. Greater coordination of dental clinician and Oral pathologists is required in proper detection and management of these lesions. This classification will be useful for the dental clinicians, oral pathologists and also for the undergraduate and post graduate dental students who deals with the diseases of oral cavity.

**Table 1. Classification of soft tissue swellings of oral cavity**

- I. Neoplasm**
  1. Epithelium origin
    - Squamous papilloma
    - Keratoacanthoma
    - Squamous cell carcinoma
    - Melanoma
    - Nevus
  2. Mesenchymal origin
    - a) Common**
      - Fibroma
      - Pyogenic granuloma
      - Peripheral giant cell granuloma
      - Peripheral ossifying fibroma
      - Traumatic neuroma
    - b) Relatively rare**
      - Lipoma

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- Neurofibroma
- Neurilemmoma
- Granular cell tumor
- Peripheral osteoma
- Hemangioma
- Leiomyoma
- Lymphangioma
- Melanotic neuroectodermal tumor of infancy
- c) Rare**
- Rhabdomyoma
- Rhabdomyosarcoma
- Kaposi's sarcoma
- Neurofibrosarcoma
- Angiosarcoma
- Leiomyosarcoma
- Liposarcoma
- Hemangiopericytoma
- Hemangioendothelioma
- Synovial sarcoma
- Neurothakeoma
- 3. Salivary gland tumors
- Pleomorphic adenoma
- Canalicular adenoma
- Mucoepidermoid carcinoma
- Adenoid cystic carcinoma
- Polymorphous low grade adenocarcinoma
- 4. Peripheral odontogenic tumors
- Ameloblastoma
- Odontogenic fibroma
- Adenomatoid odontogenic tumor
- Ameloblastic fibroma
- II. Cysts of soft tissue**
- Dermoid cyst
- Epidermoid cyst
- Nasolabial cyst
- Lymphoepithelial cyst
- Nasopalatine duct cyst
- III. Non neoplastic disorders of salivary glands**
- Mucous retention cyst
- Mucous extravasation cyst
- Necrotizing sialometaplasia
- Mikulicz's disease
- Adenomatous hyperplasia of minor salivary glands

**IV. Granulomatous diseases**

- Sarcoidosis
- Crohn's disease
- Tuberculosis

**V. Syndromes associated with intra oral swellings**

- Neurofibromatosis I (NF 1)
- Tuberous sclerosis
- Multiple endocrine neoplasia type 2B
- Multiple hamartoma syndrome

**VI. Miscellaneous**

- Parulis
- Amyloidosis
- Multifocal epithelial hyperplasia
- Congenital epulis
- Metastatic carcinoma
- Palatal abscess
- Lingual thyroid nodule
- Epulis fissuratum
- Pericoronitis
- Arteriovenous malformations
- Oral mucinosis

**REFERENCES**

1. Michael W. Finkelstein, DDS, MS, "A guide to clinical differential diagnosis of oral mucosal lesions," dentalcare.com. 2010.
2. Neville B, Damm DD, Allen CM, Bouquot J, editors. Oral and maxillofacial pathology. Philadelphia, USA: Elsevier. 2009.
3. Bajpai M, Pardhe N. Peripheral Ameloblastoma with Mixed Histological Patterns. Cukurova Med J. 2015;40 151-5.
4. Pryor SG, Lewis JE, Weaver AL, Orvidas LJ. Pediatric dermoid cysts of the head and neck. Otolaryngology: Head and Neck Surgery. 2005;132:938-42.
5. Song E., Jaishankar, G. B., Saleh, H., Jithpratuck, W., Sahni, R., Krishnaswamy, G. 2011. Chronic granulomatous disease: a review of the infectious and inflammatory complications. Clinical and Molecular Allergy : CMA,9, 10. doi:10.1186/1476-7961-9-10.