

Oral Cavity

Lecture Notes on

Diseases of Oral Cavity and Salivary Glands

Dr. Md. Sadequel Islam Talukder
MBBS, M. Phil (Pathology)
Asst. Prof. of Pathology
Mymensingh Medical College
Second edition, December 1998

Oral Soft tissue Lesions:

- Inflammation
 - Herpes simplex virus infection
 - Aphthous ulcer
 - Oral candidiasis (Thrus)
 - Glossitis
 - Xerostomia
- Oral manifestation of systemic diseases such as
 - Diphtheria, AIDS lichenplanus, pemphigus, pancytopenia, leukaemia, monocytic leukaemia etc.
- Reactive proliferation
 - Giant cell granuloma
 - Irritation fibroma
- Tumour and precancerous lesions:
 - Leukoplakia
 - Erythroplakia
 - Squamous papilloma
 - Condyloma accuminatum
 - Squamous cell carcinoma

Leukoplakia:

- Leukoplakia means simply white plaque.
- Produced by several conditions such as benign and malignant proliferation

of epithelium, tobacco or snuff-pouch keratosis, chronic cheek bite, lichen planus, palatitis nicotina and candidiasis.

Definition: Leukoplakia is a white plaque on the oral mucous membranes that can not be removed by scraping and can not be classified clinically or microscopically as another disease entity.

Thus defined, leukoplakic plaques ranged from completely benign epithelial thickening to highly atypical lesion with dysplastic changes that merge with carcinoma in situ.

Leukoplakia is a clinical term. Until proved otherwise it must be considered precancerous.

Erythroplakia:

It represents a red, velvety area within oral cavity. The epithelial cells are markedly atypical and have higher risk of malignant transformation than that with leukoplakia.

Squamous cell carcinoma:

- About 95% of cancer of oral cavity are squamous cell carcinoma.
- Others are adenocarcinoma and melanoma.
- Most frequently diagnosed between the age of 50 and 70 yrs.
- Closely associated with tobacco and alcohol.

- Chewing of betel nuts and Pan has predisposing influence.

Gross Appearance:

In the early stages cancer of oral cavity appears either as raised, firm, pearly plaques or as irregular, roughened or verrucose areas of mucosal thickening.

As they enlarge, they create protruding masses or undergo central necrosis, forming an irregular, shaggy ulcer rimmed by elevated, firm, rolled borders.

Microscopic Appearance:

The cancer begins as in situ lesion. They range from well-differentiated keratinizing neoplasms to anaplastic, sometimes sarcomatoid tumours. They tend, in time, to infiltrate locally before they metastasise to other sites.

Diseases of Salivary Glands

- Sialadenitis
- Sialolithiasis
- Neoplasms

Neoplasms:

Benign tumours:

1. Pleomorphic adenoma
2. Warthin's tumour
3. Lymphoepithelial lesion
4. Oncocytoma
5. Monomorphic adenoma
6. Benign cysts

Malignant tumours:

1. Mucoepidermoid carcinoma
2. Adenoid cystic carcinoma
3. Adenocarcinoma
4. Acinic cell carcinoma
5. Malignant mixed tumour
6. Epidermoid carcinoma

7. Other anaplastic carcinoma.

Pleomorphic Adenoma:

They represent about 60% of tumour in the parotid glands and are less common in submandibular gland and rare in minor salivary glands.

Gross Appearances:

Most pleomorphic adenoma present as basically rounded, well demarcated masses rarely exceeding 6 cm in greatest dimension. They are encapsulated. In some cases capsule is not fully developed and expansile growth produces tongue like protrusions into the surrounding gland. The cut surface is grey-white with variegated myxoid and blue translucent areas of chondroid.

Microscopic Appearance:

The dominant histologic feature is the great heterogeneity. They are composed of epithelial elements dispersed throughout a matrix of mucoid, myxoid and chondroid tissue.

Warthin's Tumour:

Gross appearance:

Most Warthin's tumours are round to oval, encapsulated masses, 2 to 5 cm in diameter. Cut surfaces are pale grey punctuated by narrow cystic or cleft like spaces filled with a mucinous or serous secretion.

Microscopic Appearances:

A double layer of epithelial cells resting on a dense lymphoid stroma sometime bearing germinal centres lines the spaces. Frequently the spaces are narrowed by polypoid projections of the lymphoepithelial elements.