

ESSENTIAL TERMINOLOGIES TO CLINICALLY DESCRIBE ORAL AND DERMAL LESIONS: A REVIEW

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ABSTRACT

Disorders which entail the oral cavity usually derive their names from either Greek or Latin. These terms are usually based on etiology or depiction of the lesion. The morphologically altered tissue gives us the objective signs of the disease. Clinicians should be well-known with the descriptive vocabulary needed to describe any lesion. The clinician by doing so can proficiently and evenly describe a lesion which could also help in listing them with respect to differential diagnosis.

Key words:

Disorders, greek, etiology, descriptive, differential diagnosis.

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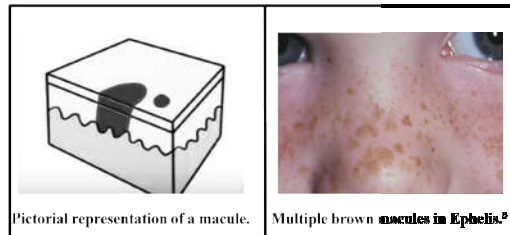
INTRODUCTION

A precise depiction is indispensable to the identification and management of an oral lesion.¹ If the management includes observing the lesion for a specified time period, then an accurate description is crucial for comparison purposes.² The lesion that has undergone change in size or symptomatology may be suspected of a malignancy. If the management includes a biopsy, the pathologist evaluating the specimen needs a description of the lesion to render the definitive diagnosis.³ Since questions about the management of the lesion may occur at a later date, documentation of the description should be included in the patient record.² Clinical description of an oral lesion gives the pathologist a vast clue towards the diagnosis of the same. Surface texture of an oral soft tissue lesion also provides significant diagnostic information, since it often indicates secondary changes to previous existing lesions.⁴ This review presents standardized terminologies for oral soft tissue lesion description that will help us in simplifying or narrowing down the diagnosis. Acquiring lesion description skills will expand the scope of current dental practice. Examples are provided for the practice of the reader which includes color illustrations of the clinical appearance and diagram of the shape, elevation and surface texture.

Some of the commonly used terminologies are

Macule: A macule is a flat lesion, even with the surface level of surrounding skin, perceptible as an area of color different

from the surrounding skin or mucous membrane.⁶ It can be due to Pigmentary abnormalities like Hypopigmentation e.g. Vitiligo or Hyperpigmentation e.g. Melanin, Permanent Vascular abnormalities e.g. Capillary Hemangioma, Transient capillary dilatation e.g. Erythema, Deposits of endogenous products e.g. bile pigments, carotene and Deposits of exogenous pigments e.g. by tattooing or drugs.



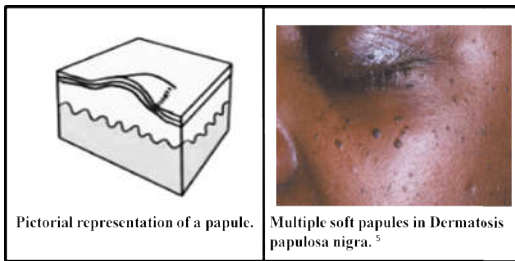
Pictorial representation of a macule.

Multiple brown macules in Ephelis.⁵

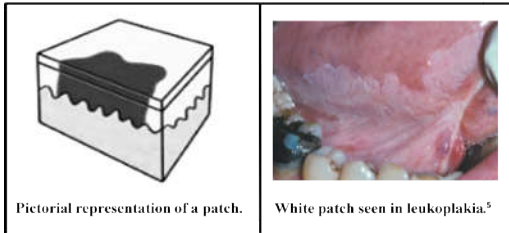
Papule: A papule is a solid elevated lesion less than 0.5 cm in size in which a significant portion projects above the plane of the surrounding skin.⁶ Types of papules are Epidermal papule which results from confined thickening of the epidermis e.g. Verruca vulgaris and Dermal papule which is due to metabolic deposits in the dermis e.g. Dermatitis papulosa nigra.

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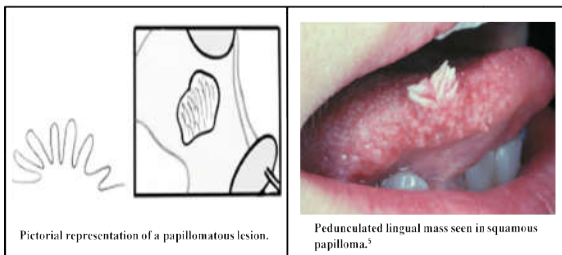


Plaque: A plaque is a solid plateau-like elevation that occupies a relatively large surface area in comparison with its height above the normal skin level and has a diameter larger than 0.5 cm⁶, e.g. Leukoplakia.

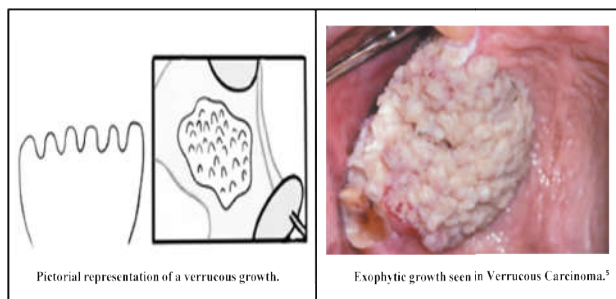


Wheal: A wheal is a swelling of the skin that is characteristically evanescent, disappearing within hours.⁶ It consists copious edema and inflammatory cells are nearly absent e.g. angioedema.

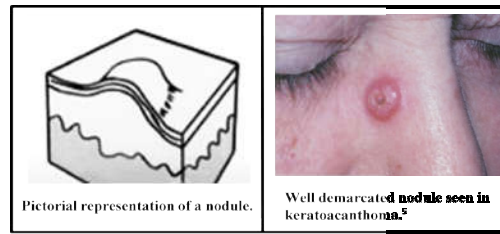
Papilloma: Papilloma is a finger like projection above skin surface due to upward extensions of the papillae, which are usually covered by hyperplastic epithelium.



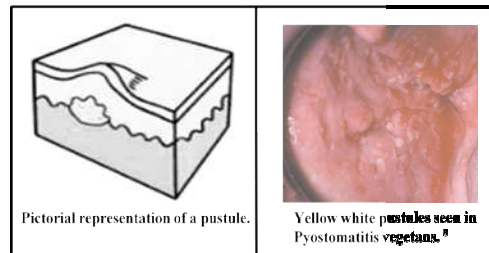
Verrucous: It is a tumor or growth exhibiting rough warty surface. E.g. Verrucous carcinoma



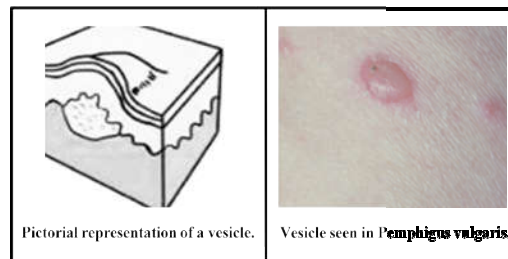
Nodule: A nodule is a solid, round or ellipsoidal, palpable lesion that has a diameter larger than 0.5 cm⁶. It is oval, round, oval polygonal or ellipsoidal in shape. It results from massive infiltrates, neoplasms or metabolic deposits in the dermis or subcutaneous tissue e.g. Fibroma, Keratoacanthoma



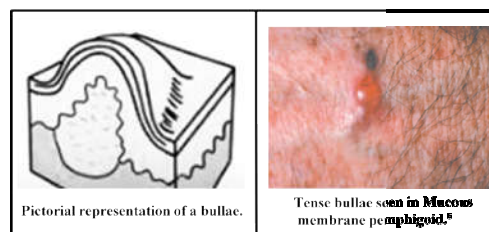
Pustule: A pustule is a circumscribed, raised cavity in the epidermis or infundibulum containing pus.⁶ The purulent exudates, composed of leukocytes with or without cellular debris, may contain bacteria or may be sterile. A gram stain and culture of the exudate from pustules should be performed when the potential for infection exists.⁶ It is commonly intraepidermal in location, e.g. Pyostomatitis vegetans



Vesicle: A vesicle is a fluid filled cavity or elevation smaller than or equal to 0.5 cm.⁶ The fluid in the oral cavity exerts equal pressure in all directions to give rise to a spherical shape. Vesicles may be non-palpable in areas of thicker stratum corneum such as the palm.⁶ They arise from cleavage at various levels of skin. Cleavage may be within the epidermis e.g. pemphigus, at epidermal-dermal interface e.g. Dermatitis herpetiformis or sub epidermal e.g. pemphigoid.



Bullae: A bulla is a fluid filled cavity or elevation larger than 0.5 cm.⁶ It can be of two types Intraepidermal e.g. Pemphigus vulgaris or Subepidermal e.g. pemphigoid.



Crust: Crusts are hardened deposits that result when serum, blood, or purulent exudates dries on the surface of the skin.⁶ A It can be differentiated depending on the color of the deposit. It can be green or yellow green (purulent exudate) and brown or dark red (blood) e.g haemorrhagic crust of lips in erythema.

Scale: A scale is flat plate or flake arising from the outer most layer of stratum corneum.⁶ Groups of coherent cornified cells packed with filamentous proteins desquamate in scales imperceptibly from the skin's surface under normal circumstances on a regular basis as the epidermis is replaced completely every 27 days.⁶ These can be cornified cells that become visible on the skin surface. The types of scales are PITYRIASIFORM (fine bran like scales), PSORIASIFORM (white non-coherent scales) e.g. Psoriasis, SMALL LAMELLAR (shedding of small lamellae) e.g. Eczema, ICHTHYOSIFORM (large scales) e.g. Ichthyosis, EXFOLIATIVE (large sheet like) e.g. Scarlet fever and COLLARETTE DESQUAMATION (scales surrounding the lesion) e.g. Pityriasis rosea

Keratosi: Keratosis refers to a horny growth that attaches firmly to the skin and is very difficult to remove. It may indicate a genetic impairment of keratinisation. It can also be due to long term exposure to light. E.g. Solar keratosis, Follicular keratosis.

Sclerosis: It refers to a circumscribed area of diffuse induration of the skin. It is detectable only by palpation E.g. Scleroderma.

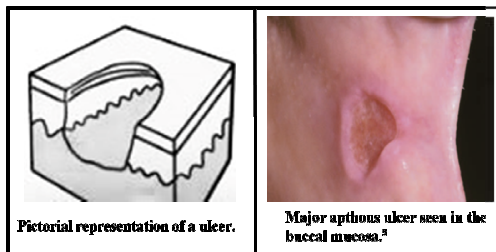
Ulcer: An ulcer is a defect in which the epidermis and at least the upper (papillary) dermis has been removed.⁶ It can be seen as a breach in the continuity of covering epithelium (skin or mucous membrane). It causes venous insufficiency, vasculitis, chronic infection, neoplasm. The classification of **Ulcer** is as following:

Clinically

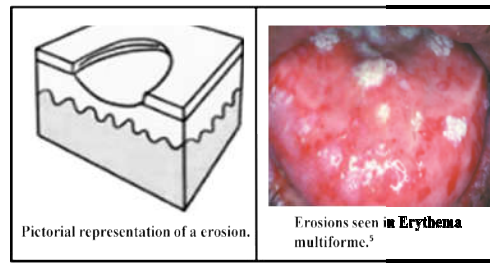
1. Spreading
2. Healing
3. Callous

Pathologically

1. NON SPECIFIC ULCERS, e.g traumatic ulcer
2. SPECIFIC ULCERS, e.g Tuberculosis
3. MALIGNANT ULCERS, e.g Epithelioma

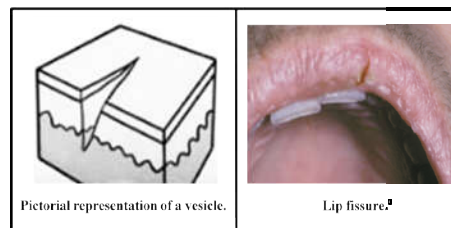


Erosion: An erosion is a moist, circumscribed, depressed lesion that results from loss of a portion or all of the viable epidermal or mucosal epithelium.⁶ The defect extending to the most superficial part of the dermis may result in pin-point bleeding in a sieve-like fashion. It involves the loss of epithelium but does not include the basal cell layer, E.g Erythema multiforme.



Excoriation: Excoriations are surface excavations of epidermis that result from scratching and are frequent findings in patients experiencing pruritis.⁶ Deeper epithelial loss tangentially to papillary body has a punctiform bleeding area derived from some capillary loops.

Fissure: A fissure is a linear loss of continuity of the skin's surface or mucosa that results from excessive tension or decreased elasticity of the involved tissue.⁶ It is a linear defect that extends from the skin surface into the dermis. It can be seen as a cleft or groove normally or otherwise showing thin slit like ulcer.



Tears: Split like tears in the skin occur in areas of skin by stretching. It is due to decreased elasticity of soft tissue together with brittle skin facilitates formation of rhagades. Corners of the mouth are common site.

Scar: A scar arises from proliferation of fibrous tissue that replaces previously normal collagen after a wound or ulceration breaches the reticular dermis. Scars have a deeper pink to red color early on before becoming hypo- or hyperpigmented.⁶ Permanent fibrous secondary skin lesion representing an end stage of inflammatory process. Types of scars are ATROPIC SCAR: Inadequate regeneration results in atrophic scar appears below the level of surrounding skin, HYPERTROPIC SCAR: Excessive connective tissue proliferation results in protruding hypertrophic scar and KELOID: Fibrous tissue which extends beyond the original wound into the normal tissue and gradually infiltrates surrounding healthy tissue.

Pedunculated: Attached by a stem like or stalk base.



Fig 1 A pedunculated lesion seen on the tongue in oral squamous papilloma.⁵

Sessile: Tumour or growth whose base is widest part of the lesion.



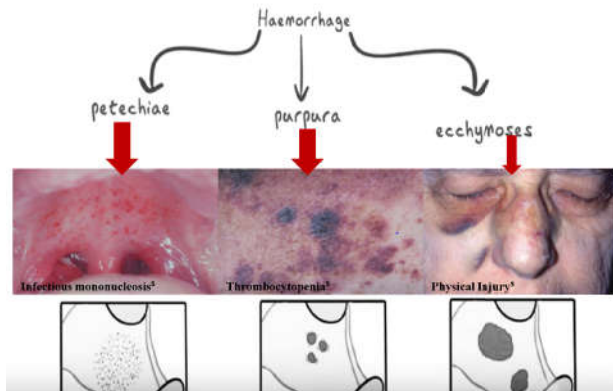
Fig 2 A sessile lesion seen in Peripheral giant cell granuloma.⁵

Haemorrhage: It can be of three types:-

Purpura: Extravasation of red blood from cutaneous vessels into skin or mucous membranes results in reddish-purple lesions included under the term purpura.⁶ The application of pressure with two glass slides or an unbreakable clear lens (diascopy) on a reddish-purple lesion is a simple and reliable method for differentiating redness due to vascular dilatation (erythema) from redness due to extravasated erythrocytes or erythrocyte products (purpura).⁶ These lesions will not blanch when pressed.

Petechiae: Petechiae are small, pinpoint purpuric macules.⁶

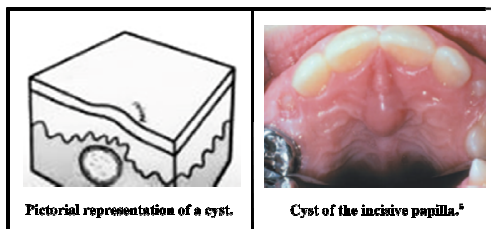
Ecchymosis: Ecchymoses are larger, bruise-like purpuric patches.⁶ These are non elevated areas of haemorrhage, larger than petechiae about 2 cm in diameter. It is formed due to extravasation of blood into skin or mucous membrane.



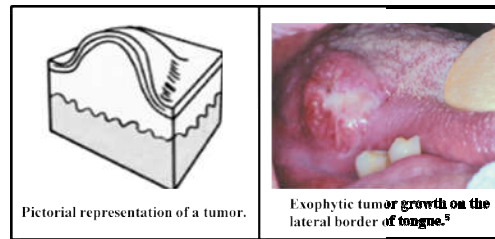
Hematoma: Accumulation of blood within tissue producing a mass outside of a blood vessel.

Telangiectasia: Vascular lesion caused by dilatation of superficial blood vessels.

Cyst: Kramer (1974) has defined a cyst as 'a pathological cavity having fluid, semifluid or gaseous contents and which is not created by the accumulation of pus'.⁷



Tumor: Willis defined Neoplasia as an abnormal mass of tissue, the growth of which exceeds and is uncoordinated with that of the normal tissues, and persists in the same excessive manner after cessation of the stimulus which evoked the change.⁸



CONCLUSION

A description of the clinical manifestation and history of an oral soft tissue lesion is necessary for precise diagnosis and management. Moreover, the description improves patient records by documenting changes in the lesion. This article explains us about the various terminologies used for describing oral lesions with an emphasis on the morphological constituent of the description. This will aid us in better and accurate diagnosis of various oral and skin diseases.

Morphologic Lesions					
RAISED	DEPRESSED	FLAT	SURFACE CHANGE	FLUID FILLED	VASCULAR
Papule	Erosion	Macule	Scale	Vesicle	Purpura
Plaque	Ulcer	Patch	Crust	Bulla	Telangiectasia
Nodule	Atrophy	Erythema	Excoriation	Pustule	Infarct
Cyst	Poikiloderma	Erythroderma	Fissure	Furuncle	
Wheal	Sinus		Lichenification	Abscess	
Scar	Striae		Keratoderma		
Comedo	Burrow		Eschar		
Horn	Sclerosis				
Calcinosis					

Fig 3 A summary of various types of morphological lesions seen in the oral cavity.⁶

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