

## Chapter 01: Introduction to Preliminary Diagnosis of Oral Lesions

Ibsen: Oral Pathology for the Dental Hygienist, 7th Edition

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### MULTIPLE CHOICE

1. Which descriptive term is described as a segment that is part of the whole?
  - a. Bulla
  - b. Vesicle
  - c. Lobule
  - d. Pustule

ANS: C

A lobule is described as a segment or lobe that is part of a whole. A bulla is a large, elevated lesion that contains serous fluid and may look like a blister. A vesicle is a small, elevated lesion that contains serous fluid. Pustules are circumscribed elevations containing pus.

REF: Vocabulary, Clinical of Soft Tissue Lesions, page 1

OBJ: 1

2. A lesion with a sessile base is described as
  - a. an ulcer.
  - b. stemlike.
  - c. pedunculated.
  - d. flat and broad.

ANS: D

*Sessile* describes the base of a lesion that is flat and broad. An ulcer is a break in the surface epithelium. A stemlike lesion is referred to as *pedunculated*. A pedunculated lesion is stemlike or stalk-based (similar to a mushroom).

REF: Vocabulary, Clinical Appearance of Soft Tissue Lesions, page 1

OBJ: 1

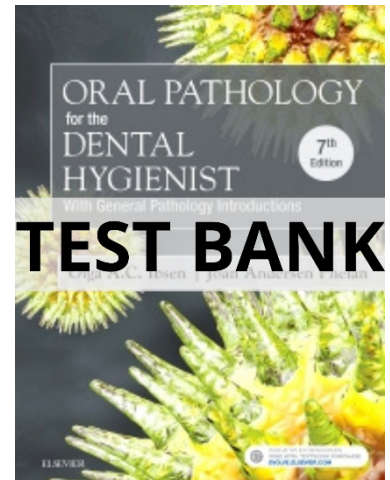
3. Which condition is *not* diagnosed through clinical appearance?
  - a. Mandibular tori
  - b. Fordyce granules
  - c. Black hairy tongue
  - d. Compound odontoma

ANS: D

The compound odontoma is initially identified radiographically as a radiopaque area in which tooth structure can be identified. No clinical component exists. Mandibular tori are identified clinically as areas of exostosis on the lingual aspects of mandibular premolars. Fordyce granules are yellow clusters of ectopic sebaceous glands diagnosed through clinical appearance. Black hairy tongue is diagnosed clinically. The filiform papillae on the dorsal tongue elongate and become brown or black. Causes include tobacco, alcohol, hydrogen peroxide, chemical rinses, antibiotics, and antacids.

REF: Radiographic Diagnosis, page 9

OBJ: 3



4. Another name for geographic tongue is
- median rhomboid glossitis.
  - benign migratory glossitis.
  - fissured tongue.
  - black hairy tongue.

ANS: B

Benign migratory glossitis is another name for geographic tongue. Research suggests that median rhomboid glossitis is associated with a chronic fungal infection from *Candida albicans*. Sometimes the condition resolves with antifungal therapy. Fissured tongue is seen in 5% of the population. It is a variant of normal. Genetic factors are typically associated with the condition. Black hairy tongue is caused by a reaction to chemicals, tobacco, hydrogen peroxide, or antacids. The filiform papillae on the dorsal tongue become elongated and are dark brown to black.

REF: Geographic Tongue, page 24

OBJ: 7

5. This bony hard structure in the midline of the hard palate is genetic in origin and inherited in an autosomal dominant manner. The diagnosis is made through clinical appearance. Which condition is suspected?



- Palatal cyst
- Torus palatinus
- Mixed tumor
- Ranula

ANS: B

A torus palatinus is developmental and bony hard and is found on the midline of the palate. Diagnosis is made on the basis of clinical appearance. A palatal cyst appears radiolucent on a radiographic examination and is not diagnosed through clinical appearance. A mixed tumor or pleomorphic adenoma is a benign tumor of salivary gland origin, found unilaterally off the midline of the hard palate. It is composed of tumor tissue that is not bony hard to palpation. *Ranula* is a term used for a mucocoele-like lesion that forms unilaterally on the floor of the mouth.

REF: Torus Palatinus, page 21

OBJ: 4

6. The gray-white opalescent film seen on the buccal mucosa of 85% of black adults is a variant of normal that requires no treatment and is termed

- a. linea alba.
- b. leukoedema.
- c. leukoplakia.
- d. white sponge nevus.

ANS: B

Leukoedema is a diffuse opalescence most commonly seen on the buccal mucosa in black individuals. Linea alba is a “white line” that extends anteroposteriorly on the buccal mucosa along the occlusal plane. It is most prominent in patients who have a clenching or grinding habit. *Leukoplakia* is a clinical term for a white lesion, the cause of which is unknown. White sponge nevus is a genetic (autosomal dominant) trait. Clinically, it is characterized by a soft white, folded (or *corrugated*) oral mucosa. A thick layer of keratin produces the whitening.

REF: Leukoedema, page 23

OBJ: 8

7. Which condition most likely responds to therapeutic diagnosis?
- a. Angular cheilitis
  - b. Amelogenesis imperfecta
  - c. Paget disease
  - d. Stafne bone cyst

ANS: A

Angular cheilitis most commonly responds to antifungal therapy once nutritional deficiencies have been ruled out. Amelogenesis imperfecta is a genetic condition associated with abnormal development of the enamel. Paget disease is a chronic metabolic bone disease. A highly elevated serum alkaline phosphatase level contributes significantly to the diagnosis. A Stafne bone cyst is determined through surgical diagnosis in which entrapped salivary gland tissue is identified.

REF: Therapeutic Diagnosis, page 18

OBJ: 3

8. The gingival enlargement in this patient was caused by a calcium channel blocker. Which medication is the likely cause?



- a. Dilantin
- b. Nifedipine
- c. Quinidine
- d. Clozapine

ANS: B

Nifedipine is a calcium channel blocker. Dilantin is an anticonvulsant used to prevent or control seizures. Quinidine is an antiarrhythmic agent used to treat cardiac arrhythmias. Clozapine is an antipsychotic used in the management of psychotic symptoms in schizophrenia.

REF: Historical Diagnosis, Fig. 1.38, page 17

OBJ: 3

9. Radiographic features, including cotton-wool radiopacities and hypercementosis, are especially helpful in the diagnosis of
- Paget disease.
  - dentinogenesis imperfecta.
  - anemia.
  - diabetes.

ANS: A

Paget disease is a chronic metabolic bone disease. Radiographically, cotton-wool radiopacities and hypercementosis are characteristic features. Dentinogenesis imperfecta is a genetic condition involving a defect in the development of dentin. Anemia, a decrease in red blood cells, requires blood tests to determine the etiologic factors. Diabetes is a chronic disorder of carbohydrate metabolism characterized by abnormally high blood glucose levels.

REF: Laboratory Diagnosis, Fig. 1.40, pages 16, 18

OBJ: 3

10. In internal resorption, the radiolucency seen on radiographic examination is usually
- well circumscribed.
  - diffuse.
  - multilocular.
  - unilocular.

ANS: B

Diffuse borders are ill defined, making it impossible to detect the exact parameters of the lesion. Therefore treatment is more difficult. *Well circumscribed* describes borders that are specifically defined. Exact margins of the lesion are identified. *Multilocular* has also been described as resembling “soap bubbles”; lobes seem to fuse together to make up the lesion. This term has been used to describe the odontogenic keratocyst. *Unilocular* means having one compartment or unit that is well defined. This term is often used to describe the radicular cyst.

REF: Vocabulary, Radiographic Terms Used to Describe Lesions in Bone, page 5

OBJ: 1

11. Which condition is diagnosed through clinical appearance?
- Fordyce granules
  - Unerupted mesiodens
  - Periapical cemento-osseous dysplasia
  - Traumatic bone cyst

ANS: A

Fordyce granules are diagnosed on the basis of their clinical appearance. They are ectopic sebaceous glands seen on the lips and buccal mucosa. Clinically, they appear as yellow lobules in clusters and are considered a variant of normal. Unerrupted mesiodens requires a radiographic image for diagnosis. Periapical cemento-osseous dysplasia requires a radiographic image, specific patient history, and a pulp test to evaluate tooth vitality. Traumatic bone cyst requires a radiographic image and surgical intervention to establish a diagnosis.

REF: Clinical Diagnosis, page 7 | Fordyce Granules, page 20      OBJ: 3

12. Retrocuspid papillae are located on the
- palate.
  - floor of the mouth.
  - gingival margin of the lingual aspect of mandibular cuspids.
  - canine eminence.

ANS: C

Retrocuspid papillae are located on the gingival margin of the lingual aspect of mandibular cuspids. Retrocuspid papillae are not located on the palate. Retrocuspid papillae are not located on the floor of the mouth. Retrocuspid papillae are not located on the canine eminence.

REF: Retrocuspid Papilla, page 22      OBJ: 3

13. Which condition is *not* considered a variant of normal?
- Fordyce granules
  - Leukoedema
  - Linea alba
  - Pyogenic granuloma

ANS: D

Pyogenic granuloma is a reactive inflammatory response to injury. It is not a variant of normal. Fordyce granules are seen in more than 80% of adults over 20 years of age and are considered a variant of normal. Leukoedema is observed in about 85% of black individuals and is considered a variant of normal. Linea alba is located on the buccal mucosa along the occlusal plane of the teeth. It is most prominent in patients who have a clenching or bruxism habit. It is so common that it is considered a variant of normal.

REF: Box 1-1, Case Study, page 20 | Variants of Normal, pages 21-23  
OBJ: 6

14. When antifungal therapy is used to treat angular cheilitis, which diagnostic process is being applied?
- Microscopic
  - Laboratory
  - Surgical
  - Therapeutic

ANS: D

Therapeutic diagnosis is used here in the treatment and management of angular cheilitis, which is most commonly a fungal condition. A careful patient history should be obtained to rule out a contributory nutritional deficiency. Microscopic diagnosis requires a biopsy. Laboratory diagnosis involves the use of clinical laboratory tests, including blood chemistries and urinalysis. Surgical diagnosis requires surgical intervention.

REF: Therapeutic Diagnosis, page 18      OBJ: 3

15. A lesion with a stemlike base is described as
- sessile.
  - macular.
  - pedunculated.
  - lobulated.

ANS: C

*Pedunculated* means the lesion has a stemlike or stalklike base similar to that of a mushroom. A sessile base is broad and flat. A macular lesion is flat, does not protrude, and is distinguished by its color. A freckle is an example of a macule. *Lobulated* means the lesion consists of lobules making up the whole.

REF: Vocabulary, Clinical Appearance of Soft Tissue Lesions, page 1  
OBJ: 8

16. A small, circumscribed lesion, usually less than 1 cm in diameter, that is elevated or protrudes above the surface of normal surrounding tissue is termed a
- papule.
  - macule.
  - vesicle.
  - bulla.

ANS: A

A papule is defined as a small circumscribed lesion, usually less than 1 cm in diameter, that is elevated or protrudes above the surface of normal surrounding tissue. A macule is flat and does not protrude above the surface of normal tissue. A vesicle is elevated and contains serous fluid. A bulla is elevated, contains serous fluid, and looks like a blister.

REF: Vocabulary, Clinical Appearance of Soft Tissue Lesions, page 1  
OBJ: 1

17. Which condition is considered a genetic/inherited disorder?
- Linea alba
  - Amelogenesis imperfecta
  - Necrotizing ulcerative gingivitis
  - Internal resorption

ANS: B

Amelogenesis imperfecta represents a group of inherited conditions affecting the enamel of teeth. Linea alba is a variant of normal characterized by the white line that extends anteroposteriorly on the buccal mucosa, along the occlusal plane. Necrotizing ulcerative gingivitis is an ulcerating gingival condition caused by anaerobic bacteria. Internal resorption is usually associated with an inflammatory response in the pulp.

REF: Historical Diagnosis, page 15      OBJ: 3

18. Ectopic geographic tongue can be found in which location?
- On the lateral border of the tongue
  - Within bone
  - On mucosal surfaces other than the tongue
  - The dorsal surface of the tongue

ANS: C

Ectopic geographic tongue is also called *stomatitis areata migrans* and is found on mucosal surfaces other than the tongue. Geographic tongue may be seen on any surface of the tongue, including the lateral borders. Ectopic geographic tongue is a mucosal condition and is unrelated to the bone. Geographic tongue may be seen on any mucosal surface and is commonly seen on the dorsal surface of the tongue.

REF: Geographic Tongue, page 24

OBJ: 7

19. A Stafne bone cyst contains
- salivary gland tissue.
  - an empty void.
  - inflammatory cells.
  - an epithelium-lined cyst containing serous fluid.

ANS: A

Stafne bone cyst is a developmental invagination in the lingual aspect of the mandible that is filled with salivary gland tissue. An empty void describes the contents of a traumatic bone cyst. A Stafne bone cyst has no inflammatory response. It is developmental and requires no treatment. A Stafne bone cyst is not a true cyst and does not have an epithelial lining. It contains normal salivary gland tissue.

REF: Surgical Diagnosis, page 18

OBJ: 3

20. Which papillae are elongated in the condition black hairy tongue?
- Circumvallate
  - Foliate
  - Filiform
  - Fungiform

ANS: C

The filiform papillae are composed primarily of keratin and are the papillae that elongate in black hairy tongue. Circumvallate papillae on the posterior dorsal tongue do not elongate. Foliate papillae are located on the posterior lateral borders of the tongue. They are vertical, slightly exophytic folds of tissue located in the same area as the lingual lymphoid tissue (lingual tonsils) and do not elongate. Fungiform papillae on the dorsal areas do not elongate.

REF: Hairy Tongue, page 24

OBJ: 3

21. Diagnosis of anemia is best accomplished through which examination?
- Laboratory tests
  - Evaluation of the color of the gingiva
  - Bleeding on probing
  - Patient medical history

ANS: A

Laboratory blood tests provide the best information with which to diagnose anemia. Although the color of the gingiva may be a clinical sign, a diagnosis of anemia, or more specifically the type of anemia, must be made through laboratory testing. Bleeding on probing is not useful in the diagnosis of anemia. The patient's medical history may be helpful in the diagnosis of anemia, but it is only contributory. The final diagnosis comes from appropriate laboratory tests.

REF: Laboratory Diagnosis, page 16      OBJ: 3

22. A radiolucency that “scallop around the roots of teeth” is often used to describe which condition?
- Traumatic bone cyst
  - Stafne bone cyst
  - Lingual mandibular bone concavity
  - Median palatine cyst

ANS: A

*Scalloping around the roots* is a term often used to describe the radiographic appearance of a traumatic bone cyst. A Stafne bone cyst usually presents as an oval radiolucency anterior to the angle of the ramus and inferior to the mandibular canal. A lingual mandibular bone concavity is the same lesion as a Stafne bone cyst. A median palatine cyst is a developmental cyst that presents as a unilocular radiolucency found in the midline of the hard palate.

REF: Vocabulary, Radiographic Terms Used to Describe Lesions in Bone, page 5  
OBJ: 3

23. When geographic tongue occurs on the dorsal tongue, the erythematous areas are described as
- inflamed.
  - depapillated.
  - allergic.
  - fungal.

ANS: B

In geographic tongue, the erythematous areas on the dorsal tongue are devoid of filiform papillae and therefore are appropriately described as depapillated. The erythematous areas seen on the dorsal tongue in geographic tongue are not caused primarily by inflammation. Geographic tongue is not an allergic reaction. Geographic tongue is not a fungal infection.

REF: Geographic Tongue, page 24      OBJ: 7

24. It has been suggested that *Candida albicans* is associated with which condition?
- Median rhomboid glossitis
  - Linea alba
  - Leukoedema
  - Retrocuspid papillae

ANS: A

Research has suggested that median rhomboid glossitis may be associated with *Candida albicans*. Linea alba is a variant of normal. Leukoedema is a variant of normal. Retrocuspid papillae are developmental and found on the gingiva of the lingual aspect of mandibular canine teeth.

REF: Median Rhomboid Glossitis, page 23      OBJ: 7



25. Which term is used to describe a radiographic lesion with borders that are specifically defined, revealing the exact margins and extent of the lesion?
- Unilocular
  - Well circumscribed
  - Diffuse
  - Multilocular

ANS: B

*Well circumscribed* defines a lesion with borders that are specifically defined and in which one can see the exact margins and extent of the lesion. *Unilocular* means having one compartment or unit that is well defined (as in a radicular cyst). *Diffuse* describes a lesion with borders that are not well defined. Multilocular lesions are described radiographically as resembling “soap bubbles” (i.e., a lesion with many lobes beyond the confines of one distinct area).

REF: Vocabulary, Radiographic Terms Used to Describe Lesions in Bone, page 5

OBJ: 1

26. Fordyce granules
- are ectopic sebaceous glands.
  - are seen on the dorsal surface of the tongue.
  - require antibiotic treatment.
  - are lesions that require biopsy for diagnosis.

ANS: A

Fordyce granules are ectopic sebaceous glands. Fordyce granules are seen on the buccal and labial mucosa, not the dorsal tongue. Fordyce granules require no treatment. Fordyce granules are diagnosed through clinical appearance. Biopsy is not necessary.

REF: Fordyce Granules, page 20

OBJ: 4

27. The base of this lesion is correctly described as



- pedunculated.
- lobule.
- bullae.
- sessile.

ANS: D

The base of this lesion is sessile, or broad and flat. A pedunculated lesion has a stemlike base similar to that of a mushroom stem. A lobule is a segment or lobe that is part of the whole. A bulla usually contains serous fluid and looks like a blister.

REF: Vocabulary, Clinical Appearance of Soft Tissue Lesions, Fig. 1.5, A, pages 1, 3

OBJ: 1

28. This torus palatinus is correctly described as



- a. bullous.
- b. papular.
- c. lobulated.
- d. nodular.

ANS: C

This torus palatinus is lobulated (i.e., lobes that are fused together). Bullous lesions contain serous fluid and resemble blisters. A papule is a soft tissue lesion that is elevated above the surface of normal surrounding tissue. A nodule is a palpable solid lesion found in soft tissue.

REF: Vocabulary, Clinical Appearance of Soft Tissue Lesions, Fig. 1.1, pages 1, 2

OBJ: 1

29. Another term for an amalgam tattoo is a

- a. melanoma.
- b. focal argyrosis.
- c. nevus.
- d. multiple myeloma.

ANS: B

Focal argyrosis is a synonym for amalgam tattoo. A melanoma is a malignant tumor. A nevus is a benign overgrowth of melanocytes. Multiple myeloma is a malignant proliferation of plasma cells.

REF: Clinical Diagnosis, page 7

OBJ: 2

30. Which finding is *not* apparent in leukoedema?

- a. Intracellular edema in the spinous cells
- b. Acanthosis of the epithelium
- c. Generalized opalescence of the buccal mucosa
- d. A white diffuse material on the buccal mucosa that can be wiped off

ANS: D

A white diffuse material that can be wiped off is significant in diagnosing pseudomembranous candidiasis. Intracellular edema in the spinous cells is found in leukoedema. Acanthosis of the epithelium is found in leukoedema. Generalized opalescence of the buccal mucosa is seen in leukoedema.