

## 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

- a. median rhomboid glossitis.
- b. benign migratory glossitis.
- c. fissured tongue.
- d. 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?
  - a. Palatal cyst
  - b. Torus palatinus
  - c. Mixed tumor
  - d. 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?
- Angular cheilitis
  - Amelogenesis imperfecta
  - Paget disease
  - 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?
- Dilantin
  - Nifedipine
  - Quinidine
  - 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.

- c. multilocular.
- d. 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?
- a. Fordyce granules
  - b. Unerupted mesiodens
  - c. Periapical cemento-osseous dysplasia
  - d. 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. Unerupted 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
- a. palate.
  - b. floor of the mouth.
  - c. gingival margin of the lingual aspect of mandibular cuspids.
  - d. 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?
- a. Fordyce granules
  - b. Leukoedema
  - c. Linea alba
  - d. 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.
  - bullae.

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 "scallops 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.

- b. depapillated.
- c. allergic.
- d. 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?
- a. Median rhomboid glossitis
  - b. Linea alba
  - c. Leukoedema
  - d. 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?
- a. Unilocular
  - b. Well circumscribed
  - c. Diffuse
  - d. 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
- a. are ectopic sebaceous glands.
  - b. are seen on the dorsal surface of the tongue.
  - c. require antibiotic treatment.
  - d. 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
- bullous.
  - papular.
  - lobulated.
  - 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
- melanoma.
  - focal argyrosis.
  - nevus.
  - 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?
- Intracellular edema in the spinous cells
  - Acanthosis of the epithelium
  - Generalized opalescence of the buccal mucosa
  - 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.

REF: Leukoedema, page 23

OBJ: 8

31. Which term best describes an elevated, 5-mm soft tissue lesion containing serous fluid?
- a. Macule
  - b. Vesicle
  - c. Lobule
  - d. Pustule

ANS: B

A vesicle is a small (less than 1 cm in diameter), elevated lesion that contains serous fluid. A macule is a flat area usually distinguished by a color different from the surrounding tissue. A lobule is described as a segment or lobe that is part of a whole. A pustule is a circumscribed elevation containing pus.

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

OBJ: 1

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

ANS: B

A stemlike lesion is referred to as *pedunculated*. An ulcer is a break in the surface epithelium. Pallor is a paleness of the skin or mucosal tissues. *Broad and flat* describes the base of a sessile lesion.

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

OBJ: 1

33. The following lesions can be identified radiographically *except* one. Which one is the *exception*?
- a. Root resorption
  - b. Fordyce granules
  - c. Interproximal dental caries
  - d. Compound odontoma

ANS: B

Fordyce granules are yellow clusters of ectopic sebaceous glands that are diagnosed through clinical appearance. Root resorption is identified radiographically when the apex of the tooth appears shortened or blunted. Interproximal dental caries are seen as radiographic radiolucencies. A compound odontoma is initially identified radiographically as a radiopaque area in which tooth structure can be identified.

34. These reddish-purple clusters observed on the ventral surface of the tongue and diagnosed through clinical observation are referred to as which variants of normal conditions?
- Palatal cyst
  - Mandibular tori
  - Lingual varicosities
  - Ranula

ANS: C

Lingual varicosities are prominent lingual veins usually observed on the ventral and lateral surfaces of the tongue. A palatal cyst is radiolucent and not diagnosed through clinical appearance. Mandibular tori are outgrowths of hard dense bone and found on the lingual aspect of the mandible. *Ranula* is a term used to describe a mucocele-like lesion that forms unilaterally on the floor of the mouth.

REF: Lingual Varicosities, page 22      OBJ: 4

35. An elevated serum alkaline phosphate level, significant in the diagnosis of Paget disease, is determined from which diagnostic category?
- Laboratory
  - Therapeutic
  - Clinical
  - Surgical

ANS: A

Laboratory tests, including blood chemistries, can provide information that contributes to a diagnosis. Therapeutic testing applies the principle of diagnosis based on clinical and historical information with confirmation by the response of the condition to therapy. Clinical diagnosis suggests that the strength of the diagnosis comes from the clinical appearance of the lesion. Surgical diagnosis is based on information about a lesion gained during surgical intervention.

REF: Laboratory Diagnosis, page 16      OBJ: 2

36. The following conditions most likely respond to therapeutic diagnosis *except* one. Which one is the *exception*?
- Angular cheilitis
  - Necrotizing ulcerative gingivitis
  - Nutritional deficiencies
  - Stafne bone cyst

ANS: D

Stafne bone cyst, in which entrapped salivary gland tissue is identified, is diagnosed through surgical examination. Angular cheilitis commonly responds to antifungal therapy once nutritional deficiencies have been ruled out. Necrotizing ulcerative gingivitis responds to hydrogen peroxide rinses. Nutritional deficiencies are common conditions diagnosed by therapeutic means.

REF: Surgical Diagnosis, page 18      OBJ: 3

37. The variant of normal coloration seen on the mandibular gingival surface is termed
- lingual varicosities.
  - leukoedema.
  - melanin pigmentation.
  - linea alba.

ANS: C

Melanin pigmentation is most commonly seen in dark-skinned individuals and gives color to the oral mucosa and gingiva. Lingual varicosities are prominent lingual veins observed on the ventral and lateral surfaces of the tongue. Leukoedema is a generalized opalescence imparted to the buccal mucosa. Linea alba is a white line that extends anteroposteriorly on the buccal mucosa along the occlusal plane of the teeth.

REF: Melanin Pigmentation, Fig. 1.50, pages 21-22

OBJ: 6

38. A white lesion that cannot be rubbed off and cannot be diagnosed on the basis of clinical characteristics alone is termed
- leukoplakia.
  - dentinogenesis imperfecta.
  - erythroplakia.
  - squamous cell carcinoma.

ANS: A

*Leukoplakia* is a clinical term for a white lesion that cannot be rubbed off and cannot be diagnosed on the basis of clinical characteristics alone. *Dentinogenesis imperfecta* is a genetic condition involving a defect in the development of dentin. *Erythroplakia* is a clinical term for a red lesion that cannot be diagnosed on the basis of clinical features alone. Squamous cell carcinoma is diagnosed by microscopic evaluation and does not refer to all white lesions that cannot be rubbed off.

REF: Microscopic Diagnosis, page 18

OBJ: 9

39. The radiographic appearance of a simple radicular cyst is best described as
- coalescence.
  - diffuse.
  - multilocular.
  - unilocular.

ANS: D

*Unilocular* means having one compartment or unit that is well defined. This term is often used to describe a radicular cyst. *Coalescence* refers to the process by which parts of a whole join together, or fuse, to make one. *Diffuse* describes a lesion with ill-defined borders, making it impossible to detect the exact parameters of the lesion. A multilocular lesion has also been described as “soap bubble”-like; the lobes appear to fuse together to make up the lesion.

REF: Vocabulary, Radiographic Terms Used to Describe Lesions in Bone, Fig. 1.13, pages 5, 6

OBJ: 1

40. A pathologic lesion found frequently in 30-year-old black women that requires a radiographic image and historical data for diagnosis is termed
- verrucous vulgaris.

- b. necrotizing ulcerative gingivitis.
- c. periapical cemento-osseous dysplasia.
- d. amalgam tattoo.

ANS: C

Periapical cemento-osseous dysplasia requires a radiograph, specific patient history, and a pulp test to evaluate tooth vitality. It is frequently found in black women in the third decade of life. Verrucous vulgaris is diagnosed on the basis of its clinical and microscopic appearance and does not require a radiograph. Necrotizing ulcerative gingivitis requires clinical and historical data for diagnosis and does not require a radiograph. An amalgam tattoo relies on clinical and historical data for diagnosis and does not require a radiograph.

REF: Historical Diagnosis, page 16      OBJ: 5

41. Leukoedema is a generalized opalescence appearing on the buccal mucosa; linea alba is a dark pigmented line appearing on the buccal mucosa.
- a. Both statements are true.
  - b. Both statements are false.
  - c. The first statement is true, and the second statement is false.
  - d. The first statement is false, and the second statement is true.

ANS: C

The first statement is true, and the second statement is false. Leukoedema is a generalized opalescence appearing on the buccal mucosa, as stated, but linea alba is not a dark pigmented line. The statement that leukoedema is a generalized opalescence appearing on the buccal mucosa is true; the statement that linea alba is a dark pigmented line is false. (Linea alba is a white line.) Leukoedema is a generalized opalescence appearing on the buccal mucosa, but linea alba is not a dark pigmented line.

REF: Leukoedema, Fig. 1.54, page 23 | Linea Alba, Fig. 1.53, page 23  
OBJ: 8

42. Each condition is considered a variant of normal *except* one. Which is the *exception*?
- a. Melanin pigmentation
  - b. Linea alba
  - c. Geographic tongue
  - d. Retrocuspid papilla

ANS: C

Geographic tongue is characterized by diffuse areas devoid of filiform papillae. It is not a variant of normal. Melanin pigmentation is commonly seen in dark-skinned individuals and is considered a variant of normal. Linea alba is located on the buccal mucosa along the occlusal plane. 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. Retrocuspid papilla is a sessile nodule on the gingival margin of the lingual aspect of the mandibular cuspids and is considered a variant of normal.

REF: Geographic Tongue, page 24 | Variants of Normal, pages 20-23  
OBJ: 6

43. The term *erythroplakia* is best used in which context?
- a. Microscopic

- b. Laboratory
- c. Surgical
- d. Clinical

ANS: D

*Erythroplakia* is a descriptive clinical term for a red lesion. 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: Vocabulary, Color of Lesion, page 2

OBJ: 9

44. The pathologic lesion seen on the dorsal surface of the tongue is characteristic of
- a. fissured tongue.
  - b. hairy tongue.
  - c. median rhomboid glossitis.
  - d. migratory glossitis.

ANS: C

Median rhomboid glossitis appears as a flat or slightly raised oval or rectangular erythematous area in the midline of the dorsal surface of the tongue. Fissured tongue is characterized by deep fissures or grooves. Hairy tongue has the appearance of white, elongated filiform papillae. *Migratory glossitis* is another name for geographic tongue and appears as patches on the lateral and dorsal surfaces of the tongue.

REF: Median Rhomboid Glossitis, page 23 | Fig. 1.20, page 8

OBJ: 7

45. Each condition is considered benign and of unknown cause *except* one. Which one is the *exception*?
- a. Hairy tongue
  - b. Amelogenesis imperfecta
  - c. Migratory glossitis
  - d. Fissured tongue

ANS: B

Amelogenesis imperfecta represents a group of inherited conditions affecting the enamel of teeth. Hairy tongue is a benign condition of unknown cause. Migratory glossitis is a benign condition of unknown cause. Fissured tongue is a benign condition of unknown cause.

REF: Historical Diagnosis, page 15

OBJ: 7

46. A medical history of a patient prescribed a calcium channel blocker may reveal which condition?
- a. Gingival enlargement
  - b. Cementoma
  - c. Paget disease
  - d. Ulcerative colitis

ANS: A

A patient taking a calcium channel blocker may exhibit gingival enlargement. A cementoma is not a result of a patient taking a calcium channel blocker. An elevated serum alkaline phosphatase level is significant for Paget disease but not for use of a calcium channel blocker. Ulcerative colitis may contribute to oral lesions but not gingival enlargement.

47. Urticaria is an example of a(n)
- genetic disorder.
  - developmental disturbance.
  - immediate response to an allergen.
  - immunodeficiency response.

ANS: C

Urticaria is an immediate response to an allergen. Urticaria is not the result of a genetic disorder. Urticaria is not the result of a developmental disturbance. Urticaria is not a result of immunodeficiency.

48. Which term describes a lesion in which parts of a whole are joined together, or fused, to make one?
- Fissured
  - Coalescence
  - Diffuse
  - Multilocular

ANS: B

*Coalescence* describes the process by which parts of a whole join together, or fuse, to make one. *Fissured* describes a cleft or groove, normal or otherwise, showing prominent depth. *Diffuse* describes a lesion with borders that are not well defined. Multilocular lesions are described radiographically as “soap bubbles” (i.e., a lesion with many lobes beyond the confines of one distinct area).

49. While obtaining diagnostic information from a patient, the dental hygienist learns that the appearance of this patient’s teeth is familial. The correct diagnosis is
- tetracycline staining.
  - pulpal dysplasia.
  - extrinsic staining.
  - dentinogenesis imperfecta.

ANS: D

Dentinogenesis imperfecta is a pathologic condition in which the family history plays a significant role in the diagnosis. Tetracycline staining is not a familial condition. Pulpal dysplasia is not a pathologic familial condition. Extrinsic staining is not a familial condition.

50. The eight categories that provide information leading to a definitive diagnosis are as follows: microscopic, clinical, laboratory, surgical, differential findings, radiographic, therapeutic, and
- etiology.
  - historical.
  - chief complaint.

d. treatment.

ANS: B

Historical information reveals past experiences that may be relevant to the diagnosis. Etiology is not a component of the definitive or final diagnosis. The chief complaint may be helpful in understanding the patient's perspective but is not considered a diagnostic tool. Treatment is decided after the definitive or final diagnosis is made, and it is not part of the information leading to the diagnosis.

REF: Making a Diagnosis, page 6

OBJ: 3

51. What is the radiographic appearance of periapical cemento-osseous dysplasia in its earliest stage?
- Radiolucent
  - Radiopaque
  - Radiolucent and radiopaque
  - Cotton-wool radiolucencies

ANS: A

In stage I of periapical cemento-osseous dysplasia, the appearance is radiolucent. Radiopacities are not seen in the early stage of periapical cemento-osseous dysplasia. In stage II, the appearance is radiolucent and radiopaque. Cotton-wool radiopacities are seen in patients with Paget disease.

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

OBJ: 5

52. All conditions are associated with lingual varicosities *except* one. Which is the *exception*?
- Red to purple enlarged vessels
  - May be associated with varicosities in the legs
  - Age-related condition
  - May swell during eating

ANS: D

Lingual varicosities do not swell during the eating process. Red to purple enlarged vessels are seen with lingual varicosities. Lingual varicosities may be associated with varicosities in the legs. Lingual varicosities are considered an age-related condition, often seen in individuals over the age of 60.

REF: Variants of Normal, pages 22-23

OBJ: 4

53. Various sizes of circumscribed elevations that contain pus are termed
- vesicles.
  - pustules.
  - papules
  - lobules

ANS: B

Pustules are variously sized circumscribed elevations containing pus. Vesicles are elevated lesions that contain serous fluid. Papules are elevated lesions that protrude above the surface of normal surrounding tissue. Lobules are segments or lobes that are part of the whole.



54. Studies have linked the presence of a lingual thyroid in association with the following life events *except* one. Which is the *exception*?
- Pregnancy
  - Infancy
  - Menopause
  - Puberty

ANS: B

Infancy is not associated with the presence of a lingual thyroid. The emergence of a lingual thyroid is linked to hormonal changes, such as pregnancy. The emergence of a lingual thyroid is linked to hormonal changes, such as menopause. The emergence of a lingual thyroid is linked to hormonal changes, such as puberty.

55. The lingual thyroid is most often found in which intraoral location?
- Posterior to the circumvallate papillae in the midline of the tongue
  - Along the occlusal plane on the buccal mucosa
  - At the junction of the hard and soft palate
  - At the labial commissures

ANS: A

The lingual thyroid is seen as a mass in the midline of the dorsal surface of the tongue, posterior to the circumvallate papillae. The lingual thyroid is not seen on the buccal mucosa. The lingual thyroid is not found at the junction of the hard and soft palate. The lingual thyroid is not found at the labial commissures.

56. Your patient is diagnosed with a lingual thyroid. What is the next step on the treatment plan?
- Biopsy
  - Surgical removal
  - Thyroid scan
  - Radiographic evaluation

ANS: C

A thyroid scan should be performed to determine if the thyroid gland is functioning normally. A biopsy is not needed for a lingual thyroid because it is composed of normal thyroid tissue. Surgical removal is not recommended since this may represent the patient's functioning thyroid. Radiographic evaluation is not helpful in the confirmation of a lingual thyroid.

57. Because of its size and location, patients with a lingual thyroid may complain of
- dysphagia.
  - gingival inflammation.
  - intraoral ulcers.
  - tooth erosion.

ANS: A

Clinical symptoms of lingual thyroid can include dysphagia, or difficulty swallowing, because of the mass located at the posterior dorsal surface of the tongue. Gingival inflammation is not associated with patients with a lingual thyroid. Intraoral ulcers are not associated with patients with a lingual thyroid. Tooth erosion is not associated with patients with a lingual thyroid.

REF: Benign Conditions of Unknown Cause, page 23

OBJ: 11

58. Where is the common intraoral location for leukoedema?
- Lateral borders of the tongue
  - Soft palate and uvula
  - Floor of the mouth
  - Buccal mucosa

ANS: D

A generalized opalescence is imparted to the buccal mucosa in leukoedema. Leukoedema is not evident on the lateral borders of the tongue. The soft palate and uvula is not a location to find leukoedema. The floor of the mouth is not a location to see leukoedema.

REF: Variants of Normal, page 23

OBJ: 8

59. The human papillomavirus (HPV) is associated with what condition?
- Thrush
  - Tuberculosis
  - Verruca vulgaris
  - Herpangina

ANS: C

Verruca vulgaris (the common wart) is caused by a low-risk type of the human papillomavirus. Thrush, or pseudomembranous candidiasis, is a superficial fungal infection seen in the oral cavity. Tuberculosis is a bacterial infection caused by inhalation of airborne droplets from someone with active disease. Herpangina is caused by a coxsackie virus and is characterized by fever, sore throat and oral lesions.

REF: Microscopic Diagnosis, page 18

OBJ: 10

60. A “white” hairy tongue indicates an increase in the amount of
- keratin.
  - medications.
  - fluoride use.
  - HPV circulating in the blood.

ANS: A

The increased amount of keratin on the filiform papillae gives the tongue a white appearance. Medications may affect the surface of the tongue but generally do not produce a white color. Fluoride use does not cause a “white” hairy tongue. The presence of the HPV does not cause a “white” hairy tongue.

REF: Benign Conditions of Unknown Cause, page 24

OBJ: 7

61. Benign migratory glossitis is a condition that does not remain static. What does this statement mean?

- a. A variety of over-the-counter treatments are available for this condition.
- b. Surgical intervention may be required.
- c. Remission and changes in the surface of the tongue occur.
- d. An intraoral habit is responsible for this condition.

ANS: C

Benign migratory glossitis (geographic tongue) is a condition that does not stay the same over time; remission and changes in the surface of the tongue occur. A condition that does not remain static does not refer to treatment protocol. A condition that does not remain static does not refer to treatment protocol. Intraoral habits are not related to benign migratory glossitis.

REF: Benign Conditions of Unknown Cause, page 24

OBJ: 7

62. Which statement about a palatal torus is *true*?
- a. A palatal torus is symptomatic.
  - b. A palatal torus appears as a radiolucent mass on a radiograph.
  - c. Palatal tori are typically bilateral, seen along the lingual side of the maxilla.
  - d. Palatal tori are inherited.

ANS: D

Palatal tori are inherited. Palatal tori are asymptomatic. A palatal torus appears as a radiopaque mass on a radiograph. Palatal tori can take on various shapes and sizes yet occur in the midline of the palate.

REF: Variants of Normal, page 21

OBJ: 4

63. Serous fluid can typically be found in which lesion?
- a. Bulla
  - b. Lobule
  - c. Macule
  - d. Papule

ANS: A

Bullae are circumscribed, elevated lesions that usually contain serous fluid and resemble a blister. Lobules are segments or lobes that are part of a whole. Macules are areas distinguished by a different color than the surrounding tissue. Papules are small, circumscribed lesions that protrude above the surface.

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

OBJ: 1

64. Which term describes a lesion that displays a color different from surrounding tissue?
- a. Bulla
  - b. Lobule
  - c. Macule
  - d. Papule

ANS: C

Macules are areas distinguished by a different color than the surrounding tissue. Bullae are circumscribed, elevated lesions that usually contain serous fluid and resemble a blister. Lobules are segments or lobes that are part of a whole. Papules are small, circumscribed lesions that protrude above the surface.

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

OBJ: 1

65. Trying to establish the correct number of primary and permanent teeth present in a 7-year-old child may best be accomplished by which diagnostic component?
- a. Clinical
  - b. Historical
  - c. Radiographic
  - d. Differential

ANS: C

A radiographic examination including intraoral and extraoral images would provide sufficient information to establish the correct number of teeth present. The clinical diagnosis would be adequate to view only the erupted teeth, not the unerupted permanent teeth. Some historical data might be helpful in this case but would not be considered the best diagnostic component. Enough information should be present in the clinical and radiographic examinations that a differential diagnosis is not necessary.

REF: Making a Diagnosis, page 9

OBJ: 3