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**ORAL DIAGNOSIS  
DEND 329**

**FINAL EXAMINATION  
DECEMBER 12, 2005**

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**STUDENT NO.**                     

**THIS EXAMINATION CONSISTS OF 100 QUESTIONS. PLEASE, FOLLOW THE INSTRUCTIONS FOR EACH SECTION.**

**Questions 1-35** *Choose the best answer based upon the description and projection presented, and indicate the answer on your scantron sheet.*

1. Which of the following statements is true considering a differential diagnosis for the projected radiolucent lesion?
  - A. Based upon the radiographic appearance, this lesion can only be a dentigerous cyst
  - ☒ B. While a dentigerous cyst should head any differential list, one should consider, among other things, a unicystic ameloblastoma and a calcifying odontogenic cyst
  - C. While a dentigerous cyst should head any differential list, one should consider, among other things, a radicular cyst and a Stafne cyst
  - D. While a unicystic ameloblastoma should head any differential list, one should consider, among other things, a dentigerous cyst and a radicular cyst
  - E. A dentigerous cyst should not be included in a differential for this lesion
  
2. Which of the following is the **most likely** diagnosis of this ulcerative lesion of the oral mucosa, which has a history of recurrence only to heal uneventfully in a week or so?
  - A. Minor aphthous ulcer
  - ☒ B. Major aphthous ulcer
  - C. Herpetic ulcer
  - D. Traumatic ulcer
  - E. An ulcer associated with erythema multiforme
  
3. Which of the following is the **most likely** diagnosis of the radiopaque mass observed in this occlusal radiograph of a middle-aged patient, who complained of pain and occasional swelling in the floor of his mouth?
  - A. Avulsed tooth
  - B. Amalgam tattoo
  - C. Phebolith
  - ☒ D. Sialolith
  - E. Shaprel form the Vietnam War

4. The 70 y.o. male patient in this case complains of bone pain, bleeding around the teeth, and a series of generalized infections. Which of the following is the **most** likely diagnosis of his condition?
- A. Paget disease
  - B. Langerhans disease
  - ☒ C. Multiple myeloma
  - D. Ewing sarcoma
  - E. Primary hyperparathyroidism
5. Which of the following should **not** be included in a list of differentials for this gingival mass?
- A. Peripheral giant cell granuloma
  - B. Peripheral ossifying fibroma
  - ☒ C. Pyogenic granuloma
  - D. Fibrous hyperplasia/irritation fibroma
  - E. Minor salivary gland tumor
6. Which of the following is the **most** likely diagnosis of this periapical radiolucency, which was discovered upon routine radiographic examination of this 12 y.o. male patient? All the teeth were vital in this region.
- A. Stafne cyst
  - B. Traumatic bone cyst
  - ☒ C. Periapical cyst
  - D. Periapical granuloma
  - E. Dentigerous cyst
7. Which of the following is the **most** likely diagnosis of this radiopaque lesion, which presented as a swelling of the lingual alveolar mucosa?
- A. Compound odontoma
  - B. Complex odontoma
  - ☒ C. Sialolith
  - D. Mandibular torus
  - E. Osteosarcoma

8. Which of the following is the **most** likely diagnosis of the mixed lesion(s) shown at the apex of the mandibular first molar in this projected radiograph?
- A. Idiopathic osteosclerosis
  - B. Mental foramen
  - ☒ C. Rarefying and condensing osteitis
  - D. Mandibular torus
  - E. Focal cemento-osseous dysplasia
9. Which of the following is the **most** likely diagnosis of the mixed radiolucent/radiopaque lesion blocking the eruption of the maxillary central incisor?
- A. Rarefying and condensing osteitis
  - B. Adenomatoid odontogenic tumor
  - C. Chronic osteomyelitis
  - ☒ D. Compound odontoma
  - E. Complex odontoma
10. Using the projected lateral skull film and a periapical radiograph of a primary molar in this young patient, which of the following is the **most** likely diagnosis?
- A. Ameloblastic fibroma
  - B. Behçet syndrome
  - C. Multiple myeloma
  - ☒ D. Langerhans cell disease
  - E. Pindborg tumor
11. The unique radiographic appearance demonstrated in this periapical radiograph is **most** commonly associated with which of the following diseases?
- A. Proliferative periostitis
  - B. Osteosarcoma
  - ☒ C. Hyperparathyroidism
  - D. Osteitis deformans
  - E. Osteopetrosis

12. This elderly patient had been on long-term antibiotic therapy when she developed these white lesions of her buccal mucosa. The lesions could be removed easily with a tongue blade. Which of the following is the **most** likely diagnosis?
- ☐ A. Aspirin burn
  - ☐ B. Lichen planus
  - ☒ C. Pseudomembranous candidiasis
  - ☐ D. Atrophic candidiasis
  - ☐ E. Leukoplakia
13. Which of the following is the **most** likely diagnosis of the radiopacity seen at the apex of this normal-appearing, vital premolar?
- ☒ A. Periapical granuloma
  - ☐ B. Idiopathic osteosclerosis
  - ☐ C. Condensing osteitis
  - ☐ D. Hypercementosis
  - ☐ E. Chronic osteomyelitis
14. The unique radiographic appearance observed in this radiograph is **most** closely associated with which of the following diseases?
- ☐ A. Fibrous dysplasia
  - ☐ B. Osteosarcoma
  - ☐ C. Osteitis deformans
  - ☒ D. Proliferative periostitis
  - ☐ E. Sickle cell anemia
15. Coupling the clinical photograph of this patient with the accompanying panoramic radiograph, this patient **most** likely has which of the following conditions?
- ☐ A. Nevroid basal cell carcinoma syndrome
  - ☐ B. Gardner syndrome
  - ☒ C. Cleidocranial dysplasia
  - ☐ D. Mandibulofacial dysostosis
  - ☐ E. Osteitis deformans

16. The lesion with a suture through it is about to be removed. This slow-growing, exophytic mass is **most** likely which of the following?
- A. Fibroma
  - ☒ B. Papilloma
  - C. Squamous cell carcinoma
  - D. Fibrosarcoma
  - E. Minor salivary gland neoplasm
17. Which of the following statements is true concerning the diagnosis of this projected radiograph?
- A. A differential list should include: dentigerous cyst, adenomatoid odontogenic tumor and a unicystic ameloblastoma
  - B. A differential list should include: dentigerous cyst, radicular cyst and an odontoma
  - C. The definitive diagnosis can only come with histologic examination of the tissue
  - D. All of the above
  - ☒ E. A and C only
18. This adult patient had several papules on his face at least two of which had been diagnosed as basal cell carcinomas. The accompanying panoramic radiograph shows some radiolucencies associated with teeth. You remember that this could be part of a syndrome. Which of the following are additional features a patient with this syndrome could manifest?
- A. Ocular hypertelorism
  - B. Odontogenic keratocysts
  - C. Palmar/plantar pits
  - ☒ D. All of the above
  - E. A and C only
19. Which of the following is the **most** likely diagnosis of this unilateral, slowly-developing, fusiform swelling of the mandible in this 20 y.o. female patient?
- A. Hyperparathyroidism
  - ☒ B. Hyperthyroidism
  - C. Fibrous dysplasia
  - D. Osteosarcoma
  - E. Proliferative periostitis

20. Which of the following disease entities is **most** likely to present this radiographic appearance knowing that there were **no** technical errors in the production of this film?
- A. Osteosarcoma
  - ☒ B. Osteopetrosis
  - C. Osteoporosis
  - D. Metastatic carcinoma
  - E. Fibrous dysplasia
21. This 60 y.o. female's chief complaint was extremely painful gingiva. You observe no other lesions intraorally. Which of the following statements is true concerning the diagnosis?
- ☒ A. Clinically, it could be called a desquamative gingivitis while a final diagnosis could be cicatricial pemphigoid or lichen planus
  - B. This is an excellent example of ANUG
  - C. Obviously the patient has a primary herpetic gingivitis
  - D. These gingival lesions are characteristic of herpes zoster
  - E. Because there are both red and white areas of the gingiva, a definitive diagnosis of lichen planus can be made
22. The clinical photograph and lateral oblique radiograph projected is that of a 70 y.o. African American male who's chief dental complaint was bilateral swelling of his "gums" so his "teeth don't fit". Which of the following is the **most** likely diagnosis of his condition?
- A. Polyostotic fibrous dysplasia
  - B. Osteoporosis
  - C. Osteopetrosis
  - ☒ D. Osteitis deformans
  - E. Osteosarcoma
23. Which of the following is **best** clinical diagnosis for this solitary cyst-like radiolucency discovered in a 65 y.o. male from which the surgeon discovered a cavity lined by soft tissue?
- A. Radicular cyst
  - B. Dentigerous cyst
  - ☒ C. Residual cyst
  - D. Gingival cyst of the adult
  - E. Adenomatoid odontogenic tumor

24. This firm, exophytic mass has been present for over a year. Which of the following is the **most** likely diagnosis?
- A. Osseous choristoma
  - B. Osteoma
  - C. Papilloma
  - D. Mucocele
  - E. Irritation fibroma/fibrous hyperplasia
25. Which of the following is the **most** likely diagnosis of these periapical lesions associated with vital teeth?
- ~~A. Rarefying and condensing osteitis~~
  - B. Osteomyelitis
  - C. Odontoma
  - ☒ D. Periapical cementoosseous dysplasia
  - E. Osteitis deformans
26. This radiograph demonstrates which of the following conditions?
- ~~A. Cementoblastoma -~~
  - B. Idiopathic osteosclerosis -
  - C. Condensing osteitis
  - D. Artifact
  - ☒ E. Hypercementosis
27. Which of the following is the **most likely** diagnosis of the radiopacity observed in this radiograph?
- ~~A. Mandibular torus~~
  - ~~B. Idiopathic osteosclerosis~~
  - C. Hypercementosis
  - ~~D. Proliferative periostitis~~
  - ☒ E. Condensing osteitis

28. Which of the following is the **most likely** diagnosis of the radiopacity observed in this radiograph?
- A. Hypercementosis
  - B. Idiopathic osteosclerosis
  - C. Condensing osteitis
  - D. Proliferative periostitis
  - E. Complex odontoma
29. What is the **most likely** diagnosis of the bluish-black areas observed on the ventral surface of this tongue?
- A. Melanoplakia
  - B. Median rhomboid glossitis
  - ☒ C. Lingual varices
  - D. Melanoma
  - E. Erythema migrans
30. Using the radiographic image and the projected photomicrograph, which of the following is the correct diagnosis in this case?
- ☒ A. Periapical cyst
  - B. Periapical granuloma
  - ~~C. Periapical cemento-osseous dysplasia~~
  - ~~D. Dentigerous cyst~~
  - ~~D. Hypercementosis~~
31. All of the following would be considered in the differential diagnosis of this multilocular radiolucent lesion except. Which one would **not** be included in the differential?
- A. Odontogenic keratocyst
  - B. Ameloblastoma
  - C. Central giant cell granuloma
  - ☒ D. Odontoma
  - E. Odontogenic myxoma



32. Using the projected radiograph and a history of pain, swelling and redness, which of the following is the **most likely** diagnosis in this case?
- A. Fibrous dysplasia
  - B. Osteomyelitis
  - ☒ C. Florid cementoosseous dysplasia
  - D. Osteopetrosis
  - ☒ E. Osteitis deformans
33. Using the projected radiograph and the accompanying photomicrograph, which of the following is the diagnosis of this multilocular radiolucent lesion?
- ☒ A. Odontogenic keratocyst
  - B. Ameloblastoma
  - C. Central giant cell granuloma
  - D. Cherubism
  - E. Osteitis deformans
34. This patient had the projected bony lesions of the jaw, one of which had been diagnosed as central giant cell granuloma and a history of kidney stones, abdominal and bone pain and depression? These findings suggest the patient may really be suffering from which of the following?
- A. Osteopetrosis
  - B. Osteoporosis
  - C. Hyperparathyroidism
  - D. Paget disease
  - E. Multiple myeloma
35. You observed the skin lesions shown in the accompanying photograph and the patient tells you she was diagnosed with skin cancer. In your physical evaluation, you note the projected bony lesions on radiograph. First and foremost, this patient should be evaluated for which of the following disease entities?
- A. Cleidocranial dysplasia
  - B. Peutz-Jeghers syndrome
  - C. Nevoid basal cell carcinoma syndrome
  - D. Gardner syndrome
  - E. Ascher syndrome

**Questions 36-100** Multiple choice questions. Choose the best answer and indicate your answer on your scantron sheet.

36. A 14 y. o. boy is seen in consultation because of bilateral swelling of the mandible. Radiographs show bilateral multilocular lesions in the ascending rami. The mother of this patient has similar findings. Which of the following is the **most** likely diagnosis of this condition?
- A. Gardner syndrome
  - B. Ellis-van Creveld syndrome
  - ☒ C. Cherubism
  - D. Cleidocranial dysplasia
  - E. Nevroid basal cell carcinoma syndrome
37. A 19 y. o. female is diagnosed with cleidocranial dysplasia. She manifests an absence of her clavicles and a mushroom-shaped skull. Which of the following is an additional feature she is **most** likely to have?
- A. Taurodontism
  - ☒ B. Supernumerary teeth
  - C. Hypercementosis
  - D. Pegged lateral incisors
  - E. Large pulp chambers
38. Which of the following is the **most** serious component of Gardner syndrome?
- A. Mandibular osteomas
  - B. Multiple odontomas
  - ☒ C. Sinus obliteration
  - D. Intestinal polyposis with a high risk of malignant transformation
  - E. Hypercementosis
39. Odontogenic keratocysts are a clinical component of which of the following?
- A. MEN III ( 2B) syndrome
  - ☒ B. Cherubism
  - C. von Recklinghausen disease
  - ☒ D. Gardner syndrome
  - E. Nevroid basal cell carcinoma syndrome

40. Which of the following is considered to be the **most** serious manifestation of MEN III (2B) syndrome?
- A. Medullary carcinoma of the thyroid
  - B. Adenocarcinoma of the colon
  - C. Pheochromocytoma
  - D. Basal cell carcinomas
  - E. Mucosal neuromas
41. Which of the following is true for von Recklinghausen disease?
- A. It is inherited as an autosomal recessive trait
  - B. Patients may manifest café au lait spots
  - C. Patients have gingival fibromatosis
  - D. Patients have a generalized whitening of the oral mucosa
  - E. No known risk exists for malignant transformation of the neurofibromas
42. Which of the following statements concerning leukoplakia is true?
- A. Most cases represent examples of epithelial dysplasia
  - B. Sites that are at high risk for epithelial dysplasia include the palate and gingiva
  - C. A biopsy should be performed to establish a definitive diagnosis
  - D. Leukoplakia is less common than erythroplakia
  - E. Leukoplakia is a term that describes a histologic appearance of epithelium
43. Which of the following statements concerning an ameloblastoma is true?
- A. It often occurs in young children
  - B. It is a radiopaque lesion
  - C. It often occurs in the mandibular molar and ramus region
  - D. It should be treated with conservative surgical excision
  - E. It usually appears as a unilocular radiolucency
44. A benign cementoblastoma may be recognized radiographically for which of the following reasons?
- A. It is usually associated with the root of an unerupted tooth
  - B. It is a well-circumscribed radiopaque lesion with a radiolucent halo attached to the root of a tooth
  - C. It is an ill-defined radiolucent lesion containing scattered opacifications
  - D. It has a multilocular radiolucent appearance
  - E. It has a solitary cyst-like radiolucent appearance

45. A compound odontoma differs from a complex odontoma in that a compound odontoma:
- A. Is composed of tooth-like structures
  - B. Has unlimited growth potential
  - C. Is composed primarily of pulp tissue
  - D. Is located in the posterior mandible
  - E. Is composed of a haphazard arrangement of enamel, dentin and pulp that does not resemble a normal tooth
46. Which of the following has a **maxillary** jaw predilection?
- A. Dentigerous cyst
  - B. Traumatic bone cyst
  - C. Stafne cyst
  - D. Residual cyst
  - E. Odontogenic keratocyst
47. A malignant tumor of bone-forming tissue is called which of the following?
- A. Osteosarcoma
  - B. Osteoma
  - C. Chondrosarcoma
  - D. Chondroma
  - E. A and C
48. Which of the following neoplasms does **not** arise from squamous epithelium?
- A. Epidermoid carcinoma
  - B. Squamous cell carcinoma
  - C. Verrucous carcinoma
  - D. Papilloma
  - E. Adenoid cystic carcinoma
49. Which of the following malignant tumors is **most** closely associated with a "onionskin" radiographic appearance?
- A. Osteosarcoma
  - B. Fibrous dysplasia
  - C. Chondrosarcoma
  - D. Ewing sarcoma
  - E. Proliferative osteitis

50. A 50 y. o. Black female has multiple, asymptomatic, radiopaque masses in the maxilla and mandible. No expansion of bone take place. Which of the following is the **most** likely diagnosis?
- A. Multiple odontomas
  - B. Cementifying fibromas
  - C. Periapical cemento-osseous dysplasia
  - D. Focal cemento-osseous dysplasia
  - E. Florid cemento-osseous dysplasia
51. Which of the following is **not** an example of a benign fibro-osseous lesion?
- A. Odontoma
  - B. Periapical cemento-osseous dysplasia
  - C. Ossifying fibroma
  - D. Cementifying fibroma
  - E. Fibrous dysplasia
52. Which of the following is **most** closely associated with precocious puberty in females?
- A. Monostotic fibrous dysplasia
  - B. McCune-Albright syndrome
  - C. Paget disease
  - D. von Recklinghausen disease
  - E. Periapical cemento-osseous dysplasia
53. Periapical cemento-osseous dysplasia is characteristically located in which of the following locations?
- A. Anterior maxilla
  - B. Anterior mandible
  - C. Posterior maxilla
  - D. Posterior mandible
  - E. Mandibular premolar region
54. In which of the following diseases are café au lait spots seen on the skin?
- A. Polyostotic fibrous dysplasia -
  - B. Paget disease
  - C. Osteomalacia
  - D. Monostotic fibrous dysplasia
  - E. Osteopetrosis

55. Bone resorption, osteoblastic repair, loss of lamina dura, hypercementosis and “cotton-wool” radiopacities are characteristic of which of the following disease entities?
- A. McCune-Albright syndrome
  - B. Letter-Siwe disease
  - C. Osteitis deformans
  - D. Polyostotic fibrous dysplasia
  - E. Florid cemento-osseous dysplasia
56. Which of the following is the only recommended treatment modality for patients with fibrous dysplasia?
- A. Radiation therapy
  - B. Surgery
  - C. Chemotherapy
  - D. Antibiotic therapy
  - E. Bone marrow transplantation
57. Which of the following is helpful in the diagnosis of Paget disease?
- A. Complete blood count
  - B. Serum acid phosphatase
  - C. Serum alkaline phosphatase
  - D. Serum calcium
  - E. Urinalysis
58. Osteomalacia is usually caused by a deficiency of which of the following?
- A. Vitamin A
  - B. Vitamin C
  - C. Vitamin D
  - D. Alkaline phosphatase
  - E. PTH
59. Osteomalacia in children is called which of the following?
- A. Osteitis deformans
  - B. McCune-Albright syndrome
  - C. Osteopetrosis
  - D. Osteoporosis
  - E. Rickets

60. Hypercalcemia, hypophosphatemia and abnormal bone metabolism are characteristic of which of the following conditions?
- A. Hyperthyroidism
  - B. Hypothyroidism
  - C. Hypoparathyroidism
  - D. Hyperparathyroidism
  - E. Cherubism
61. Which of the following oral complications is **not** associated with diabetes mellitus?
- A. Candidiasis
  - B. Excessive periodontal bone loss
  - C. Petechiae
  - D. Mucormycosis
  - E. Xerostomia
62. Which of the following is **not** characteristic of primary hyperparathyroidism?
- A. Osteoclastic bone resorption
  - B. Excessive production of PTH
  - C. Increased serum calcium
  - D. Giant cell lesions of bone
  - E. "Onionskin" radiographic appearance
63. Using a stethoscope to listen to abnormal noises in the temporomandibular joint is called which of the following?
- A. Audiology
  - B. Auscultation
  - C. Palpation
  - D. Arthrography
  - E. Crepitus
64. Which of the following lesions would have a predilection for patients under the age of 30 years?
- A. Multiple myeloma
  - B. Paget disease
  - C. Primary hyperparathyroidism
  - D. Ameloblastic fibroma
  - E. Metastatic carcinoma to the jaws

65. Which cyst is said to develop "in place of" a tooth?
- A. Radicular cyst
  - ☒ B. Primordial cyst
  - C. Odontogenic keratocyst
  - D. Dentigerous cyst
  - E. Eruption cyst
66. Which cyst is characterized by its unique histologic appearance and frequent recurrence?
- A. Residual cyst
  - B. Dentigerous cyst
  - C. Odontogenic keratocyst
  - D. Lateral periodontal cyst
  - E. Stafne cyst
67. The lateral periodontal cyst is defined, in part, by its location. In which area of the jaws is the lateral periodontal cyst **most** commonly found?
- ☒ A. Mandibular third molar region
  - B. Between the mandibular canine and first premolar
  - C. Between the maxillary canine and first premolar
  - D. Between the maxillary central incisors
  - E. In the maxillary tuberosity region
68. With which of the following cysts is the associated tooth **non-vital**?
- A. Lateral periodontal cyst
  - B. Nasopalatine canal cyst
  - ☒ C. Dentigerous cyst
  - ☒ D. Radicular cyst
  - E. Incisal canal cyst
69. Dysphagia is **most** closely associated with which of the following cysts?
- A. Static bone cyst
  - ☒ B. Thyroglossal tract cyst
  - C. Traumatic bone cyst
  - D. Median palatal cyst
  - E. Nasolabial cyst



70. Which oral lesion has the greatest malignant potential?
- A. A white patch on an edentulous ridge
  - B. A white patch in the floor of the mouth
  - ☒ C. A velvety red patch with no known cause
  - D. A white patch adjacent to a fractured amalgam
  - E. A red patch adjacent to a fractured amalgam
71. Which cyst is considered a pseudocyst?
- ☒ A. Odontogenic keratocyst
  - B. Traumatic bone cyst
  - C. Lymphoepithelial cyst
  - D. Dentigerous cyst
  - E. Primordial cyst
72. Which cyst is characteristically pear-shaped?
- A. "Globulomaxillary" cyst
  - B. Median palatal cyst
  - C. Nasopalatine cyst
  - D. Dentigerous cyst
  - ☒ E. Odontogenic keratocyst
73. Which **developmental** anomaly is often associated with a non-vital tooth and periapical pathosis?
- A. Dens evaginatus
  - ☒ B. Dens in dente
  - C. Taurodontism
  - D. Talon cusp
  - E. Radicular cyst
74. Which of the following is the **most** common salivary gland neoplasm?
- A. Adenoid cystic carcinoma
  - B. Basal cell adenocarcinoma
  - C. Cylindroma
  - D. Mucoepidermoid carcinoma
  - E. Pleomorphic adenomas

75. A (benign) mixed tumor classically contains tissue that resembles connective tissue. Which of the follow cells gives rise to this tissue?
- A. Squamous epithelial cells
  - B. Mucous cells
  - C. Chondroblasts
  - D. Fibroblasts
  - E. Myoepithelial cells
76. Which of the following statements is true of oral cancer?
- A. Primary squamous cell carcinoma is the most common oral cancer
  - B. The current five-year survival rate is approximately 75%
  - C. Intraorally, the most common site for oral cancer is the ventral surface of the tongue
  - D. All of the above
  - E. A and C only
77. Which of the following represents the earliest clinical manifestation of an oral squamous cell carcinoma?
- A. Exophytic mass
  - B. Non-healing ulcer
  - C. Erythematous macule or plaque
  - D. Destructive radiolucency
  - E. Fungating mass
78. Verrucous carcinoma was separated from the typical squamous cell carcinoma because of which of the following?
- A. It does not occur in the oral cavity
  - B. It metastasizes more frequently
  - C. It responds better to chemotherapy
  - D. It grows more rapidly
  - E. It has a better prognosis
79. Sialolithiasis involves which site **most** commonly?
- A. Minor salivary glands of the hard palate
  - B. Submandibular gland and its duct
  - C. Sublingual gland and its duct
  - D. Parotid gland and its duct
  - E. Minor salivary glands of the floor of the mouth

80. Which of the following is **least** likely to present as a multilocular radiolucent lesion?
- A. Ameloblastic fibroma
  - B. Central giant cell granuloma
  - C. Odontogenic keratocyst
  - D. Multiple myeloma
  - E. Odontogenic myxoma
81. Which of the following lesions may present as an ill-defined radiolucency with a ragged border?
- A. Metastatic carcinoma
  - B. Fibrous dysplasia
  - C. Chronic inflammation/chronic osteomyelitis
  - D. All of the above
  - E. A and C only
82. Which of the following lesions may present with more than one radiographic appearance depending upon the stage of the lesion?
- A. Periapical cemento-osseous dysplasia
  - B. Paget disease
  - C. Fibrous dysplasia
  - D. All of the above
  - E. A and C only
83. Which of the following disease entities is associated with a positive Nikolsky sign?
- A. Pemphigus vulgaris
  - B. Lichen planus
  - C. Cicatricial pemphigoid
  - D. All of the above
  - E. A and C only
84. The more severe form of erythema multiforme is called which of the following?
- A. Ascher syndrome
  - B. Behçet syndrome
  - C. Stevens-Johnson syndrome
  - D. Melkerson-Rosenthal syndrome
  - E. Jaffe-Lichtenstein syndrome

85. Aphthous or aphthous-like ulcers have been associated with which of the following systemic diseases?
- A. Behçet syndrome
  - B. Ulcerative colitis
  - C. Crohn disease
  - D. All of the above
  - E. A and C only
86. Which of the following lesions has the posterior mandible as its site of predilection?
- A. Ameloblastoma
  - B. Odontogenic keratocyst
  - C. Calcifying epithelial odontogenic tumor
  - D. All of the above
  - E. A and C only
87. Which of the following is true of osteosarcoma of the jaws?
- A. Most common primary malignant tumor of bone
  - B. May present as symmetric widening of the periodontal ligament space
  - C. While patients are usually less than 40 years of age, osteosarcomas of the jaws typically occur in an older age group than those of the long bones
  - D. All of the above
  - E. A and C only
88. Which of the following diseases commonly presents as radiolucencies with poorly defined and/or ragged borders?
- A. Osteopetrosis
  - B. Compound odontomas
  - C. Osteomyelitis
  - D. All of the above
  - E. A and C only
89. Which of the following statements is true of calcifying odontogenic cysts (COCs)?
- A. Occurs in both a cystic and a solid neoplastic form
  - B. Occurs more commonly in the anterior maxilla of female patients
  - C. The lining epithelium of COCs often contain ghost cells
  - D. All of the above
  - E. A and C only

90. Metastatic carcinomas may appear as mixed radiolucent/radiopaque lesions with poorly demarcated borders. This feature is especially associated with the primary carcinoma arising in which of the following organs?
- A. Kidney
  - ☒ B. Breast
  - C. Colon
  - D. Lung
  - E. Pancreas
91. Which of the following is often associated with osteopetrosis?
- A. Secondary osteomyelitis
  - B. Adenocarcinomas of the colon
  - ☒ C. Visual and hearing impairment
  - D. All of the above
  - E. A and C only
92. Which of the following statements is true of **compound** odontomas?
- ☒ A. May prevent the eruption of teeth
  - B. Appear as an amorphous/haphazard mass of dental tissues, ie. enamel, dentin....
  - C. Are more common in the posterior segments of the jaws
  - D. All of the above
  - E. A and C only
93. Which of the following disease entities is **most** often associated with children manifesting teeth “floating in air”?
- A. Ameloblastic fibroma
  - B. Langerhans cell disease
  - C. Cherubism
  - D. Aneurysmal bone cyst
  - E. Ewing sarcoma
94. Which of the following may appear as a soft tissue radiopacity superimposed on bone?
- A. Amalgam tattoos
  - B. Phleboliths
  - C. Sialoliths
  - ☒ D. All of the above
  - E. A and C only

95. Which of the following may appear as a mixed radiolucent/radiopaque lesion?
- A. Periapical cemento-osseous dysplasia —
  - B. Odontoma —
  - C. Adenomatoid odontogenic tumor —
  - ☒ D. All of the above
  - E. A and C only
96. Which of the following is usually seen at the apex of a non-vital tooth?
- A. Periapical abscess
  - B. Condensing osteitis
  - C. Periapical granuloma
  - ☒ D. All of the above
  - E. A and C only
97. In comparing recurrent aphthous ulcers with recurrent ulcers associated with herpes simplex infection, in which of the following ways are they **similar**?
- A. Both may have prodromal symptoms
  - B. Both tend to recur on keratinized tissue
  - C. Both have a viral etiology
  - D. All of the above
  - E. A and C only
98. Which of the following is the causative agent for verruca vulgaris?
- A. HSV
  - ☒ B. HPV
  - C. CMV
  - D. VZV
  - E. EBV
99. The etiology of erythema migrans is **best** described as which of the following?
- A. Is caused by Epstein-Barr virus
  - B. Is an immunologically mediated disease
  - C. Unknown
  - ☒ D. Is a form of erythema multiforme
  - E. Is caused by a coxsackie virus

100. Which of the following is the **most** common oral **mucosal** ulcer?

- A. Recurrent herpes ulcer
- B. Traumatic ulcer
- C. Recurrent aphthous ulcer
- D. An ulcer from an odontogenic infection
- E. An ulcer of erosive lichen planus

ORAL DIAGNOSIS  
DEND 329

FINAL EXAMINATION

NAME Amy Richter

DECEMBER 12, 2003

STUDENT NO. 552

THIS EXAMINATION CONSISTS OF 115 QUESTIONS. PLEASE, FOLLOW THE INSTRUCTIONS FOR EACH SECTION.

Questions 1-60 (one point each) Choose the best answer based upon the description and projection presented, and indicate the answer on your scantron sheet.

1. Base upon the radiographic appearance and projected photomicrograph, what is the most likely diagnosis of the radiolucency observed at the root apex of this non-vital tooth?

A. Periapical abscess  
B. Periapical granuloma  
C. Periapical cyst  
D. Periapical osteitis X  
E. Periapical cemento-osseous dysplasia X

histo → epith lining → cyst  
w/ empty center

2. Which of the following is the most likely diagnosis of the firm exophytic mass seen in the mandibular incisor region?

A. Pyogenic granuloma ← assoc w/ plaque / calc.  
B. Fibroma  
C. Mucocele  
D. Exostosis X  
E. Mucoepidermoid carcinoma X

3. The teeth in this case were asymptomatic, vital and of normal color. Which of the following is the most likely of these periapical radiolucencies?

A. Condensing osteitis X  
B. Periapical granuloma X - non-vital  
C. Periapical cyst (radicular cyst) X - non-vital  
D. Periapical cemento-osseous dysplasia  
E. Accessory mental foramen

Lower incisors



4. Which of the following is the **most likely** diagnosis of the firm exophytic mass observed in the vestibule region of the denture wearer?

A. Papilloma ✗  
B. Verrucous carcinoma ✗  
C. Benign salivary gland neoplasm ✗  
D. Hemangioma ✗  
E. Epulis fissuratum ← *edent*

5. What is the **most likely** diagnosis of this asymptomatic radiolucent lesion, which upon surgical exploration the oral surgeon reported that he found an "empty space"?

A. Stafne cyst  
B. Traumatic bone cyst ← *mand pm/m*  
C. Lateral periodontal cyst  
D. Periapical cyst  
E. Ameloblastoma

6. Which of the following is the **most likely** diagnosis of this slow-growing firm mass that had been present for "a few years"?

A. Papilloma ✗  
B. Fibrous hyperplasia/fibroma ←  
C. Mucocele ✗  
D. Pyogenic granuloma ✗  
E. Squamous cell carcinoma ✗

7. The bluish lesion observed in the tongue of this patient, who was in exceptionally good health, could be emptied by digital pressure. Which of the following is the **most likely** diagnosis of this lesion?

A. Mucocele  
B. Hemangioma ←  
C. Granular cell tumor  
D. Kaposi sarcoma  
E. Oral melanotic macule

8. Which of the following should be placed first in your list of differential diagnoses of this pericoronal radiolucency?

?  
0  
A. Adenomatoid odontogenic tumor - ant?  
B. Unicystic ameloblastoma  
C. Dentigerous cyst - post? mand?  
D. Normal follicular space → too large  
E. Periapical cyst

9. The patient in this case indicated that she had had similar lesions at the same site previously and that they healed in a "couple of weeks". This solitary lesion was described as quite painful. Which of the following lesions should head your list of differential diagnoses?
- A. Recurrent herpes simplex infection  
 B. Recurrent aphthous ulcer ← *B mucosae*  
 C. Ectopic geographic tongue  
 D. Cicatricial pemphigoid  
 E. Erythema multiforme, minor
10. Which of the following should be first in your list of differential diagnoses for the projected pericoronal radiolucency discovered in this teenage female patient?
- A. Ameloblastoma, solid/multicystic *max*  
 B. Calcifying odontogenic cyst ←  
 C. Unicystic ameloblastoma *X*  
 D. Adenomatoid odontogenic tumor ← *ant, canine, snowflake calc?*  
 E. Periapical cyst or granuloma
11. The appearance of this solitary mass on the anterior tongue of this 26 y.o. female patient is most consistent with a diagnosis of which of the following lesions?
- A. Fibroma  
 B. Papilloma ~ *rough*  
 C. Lymphangioma  
 D. Granular cell tumor  
 E. Hairy leukoplakia *X*
12. The patient was unaware of this solitary cyst-like radiolucency. Which of the following would most likely be the diagnosis of this lesion?
- A. A portion of the maxillary sinus  
 B. Solitary plasmacytoma  
 C. Stafne cyst  
 D. Traumatic bone cyst  
 E. Residual cyst ← *@ extraction site*

18. The asymptomatic, solitary, fusiform swelling of the right mandible in this 18 y.o. female patient is **most likely** which of the following?

- A. Hyperparathyroidism X old
- B. Ameloblastoma X
- C. Acute osteomyelitis X
- D. Fibrous dysplasia ←
- E. Traumatic bone cyst X

19. These keratotic white lesions with a red halo were observed bilaterally in the buccal mucosa of a 43 y.o. female patient. Which of the following is **most likely** the diagnosis of these lesions?

- A. Linea alba
- B. Leukoedema X
- C. Lichen planus ~? Wickham's? ←
- D. White sponge nevus
- E. Leukoplakia



20. This is the cross section through the body of the mandible. Of the following lesions, this radiographic appearance is **most consistent** with a diagnosis of which of the following?

- A. Osteosarcoma ←
- B. Hyperparathyroidism X
- C. Fibrous dysplasia
- D. Central giant cell granuloma
- E. Ameloblastoma

Sunburst.

21. The solitary, bluish-black macule observed on the gingiva and extending into the vestibule of this patient had been present for "many months" without apparent change. The macule is **most likely** which of the following?

- A. Amalgam tattoo ← near large restoration
- B. Melanoplakia
- C. Melanoma
- D. Hematoma
- E. Hemangioma

22. The 64 y.o. male patient complained of bone pain and numerous infections over the last several months. Laboratory tests indicated Bence Jones proteins in his urine. These findings are **most consistent** with a diagnosis of which of the following?
- A. Langerhans cell disease
  - B. Paget disease
  - C. Metastatic carcinoma
  - ☒ D. Multiple myeloma
  - E. Sickle cell anemia
23. The numerous yellowish-white plaques on the buccal mucosa of this patient are **most likely** which of the following?
- A. Multiple lipomas X
  - ☒ B. Fordyce granules
  - C. The result of high serum cholesterol levels X
  - D. The result of cheek chewing X
  - E. Minor salivary glands
24. This radiograph demonstrates multiple "punched out radiolucencies" in a 10 y.o. male patient. In addition to the bony lesions the patient manifested exophthalmos and diabetes insipidus. This is **most likely** a case of which of the following?
- ☒ A. Langerhans cell disease
  - B. Paget disease X
  - C. Multiple myeloma X
  - D. Sickle cell anemia
  - E. Thalassemia
- polyoma.*
25. The malignant transformation potential for the projected palatal lesion is **best described** by which of the following?
- Nicotine stomatitis*
- A. Greater than proliferative verrucous leukoplakia
  - B. Equal to that of erythroleukoplakia
  - C. Less than erythroplakia but more than leukoplakia
  - ☒ D. Rarely, if ever, occurs

26. The patient in this case is an elderly female who indicates she has had several fractures and back pain over the past 5 years. The history and radiographic appearance of the mandible are **most consistent** with which of the following disease entities?

A. Osteopetrosis  
B. Osteoporosis  
C. Multiple myeloma  
D. Metastatic carcinoma  
E. Polyostotic fibrous dysplasia

*Mand not v. dens  
(gen rarefaction)*

27. This complete denture patient wears his dentures almost constantly. The elevated warty lesions of the palatal vault are **most likely** which of the following?

A. Stomatitis nicotina  
B. Papilloma  
C. Necrotizing sialometaplasia  
D. Candidiasis  
E. Papillary hyperplasia

*may be candida*

28. This African-American patient suffers from repeat infections, delayed growth and renal problems. Coupling this history with the projected radiograph, this patient **most likely** has which of the following disease entities?

A. Osteosarcoma  
B. Iron deficiency anemia  
C. Sickle cell anemia  
D. Fibrous dysplasia  
E. Cherubism

*hair on end*

29. This firm, smooth swelling was discovered near the junction of the hard and soft palates in a 60 y.o. female patient. She indicated the lesion had been slowly enlarging for the past "couple of years". Which of the following lesions should be placed first in your list of differential diagnoses?

A. Maxillary torus  
B. Papillary hyperplasia  
C. Mucocele  
D. Minor salivary gland tumor  
E. Nicotine stomatitis

30. Which of the following is the **most likely** diagnosis of the mixed radiolucent-radiopaque lesions found at the apices of the mandibular first molar?

- A. Periapical cemento-osseous dysplasia
- B. Focal cemento-osseous dysplasia
- C. Calcifying odontogenic cyst
- D. Odontoma
- ☒ E. Rarefying and condensing osteitis ←

Non vital.



31. The patient in this case is a 64 y.o. male, who has type II diabetes mellitus, hypertension and smokes and drinks heavily. The roughened lesion observed in the floor of his mouth and over the mandibular alveolar ridge is indurated and occasionally bleeds. Which of the following is the **most likely** diagnosis of this lesion?

- A. Papilloma ✗
- ☒ B. Squamous cell carcinoma → ?
- C. Melanoma ✗
- D. Basal cell carcinoma ✗
- E. Verruca vulgaris ✗

32. The mixed periapical radiolucent-radiopaque lesion is associated with teeth which are normal in appearance and test vital with pulp testing. What is the **most likely** diagnosis of this lesion?

- ☒ A. Periapical cemento-osseous dysplasia
- B. Rarefying and condensing osteitis ✗
- C. Odontoma ✗
- D. Calcifying odontogenic cyst ✗ - periapical
- E. Osteitis deformans Paget ✗

33. Which of the following is the **best** diagnosis for the white lesion observed in this projection showing the clinical picture and a photomicrograph of the lesion?

- A. Odontogenic keratocyst ✗
- B. Squamous cell carcinoma ✗
- ☒ C. Hyperkeratosis and acanthosis consistent with a clinical diagnosis of leukoplakia
- D. Leukoedema
- E. White sponge nevus

thick spinous  
thick keratin

34. Which of the following conditions is observed involving the two premolar teeth seen in this radiograph?
- A. Periapical cemento-osseous dysplasia - vital
  - B. Idiopathic osteosclerosis - vital
  - C. Condensing osteitis - non vital
  - ☒ D. Hypercementosis - PDL can be seen
  - E. Hyperostosis X
35. Which of the following is the **most likely** diagnosis of the red lesion to which the arrow is pointing?
- ☒ A. Squamous cell carcinoma
  - B. Median rhomboid glossitis
  - C. Erythema migrans
  - D. Erythroplakia
  - E. Lingual varix
36. What is the **most likely** diagnosis of the radiopacity to which the head of the arrow is pointing?
- ☒ A. Condensing osteitis
  - B. Idiopathic osteosclerosis ←
  - C. Hypercementosis
  - D. Proliferative periostitis X
  - E. ~~Periapical granuloma~~ X
- tooth has been RCT
37. What is the **most likely** diagnosis of the bluish-black areas observed on the lingual surface of this tongue?
- A. Erythema migrans
  - B. Median rhomboid glossitis
  - C. Hemangioma
  - D. Lymphangioma
  - ☒ E. Lingual varices ←
38. Using the radiographic image and the projected photomicrograph, which of the following is the correct diagnosis in this case?
- A. Periapical cyst
  - ☒ B. Periapical granuloma
  - C. Periapical cemento-osseous dysplasia
  - D. Dentigerous cyst
  - D. Hypercementosis
- Non vital  
filled w/ infam cells

39. What is the **most likely** diagnosis of the brownish-black macule observed on the lip of this 22 y.o. male patient? He says it has been there a "long time" and has **not** changed in size, shape or color and it did not blanch with digital pressure

- A. Amalgam tattoo ✗
- B. Melanoma ✗
- ☒ C. Labial melanotic macule ←
- D. Hematoma
- E. Hemangioma

40. Using the projected radiograph and accompanying photomicrograph, which of the following is the diagnosis of this multilocular radiolucent lesion?

- ~~A. Odontogenic keratocyst~~
- ☒ B. Ameloblastoma ←
- C. Central giant cell granuloma ✗
- D. Cherubism ✗
- E. Osteitis deformans

*ant mand  
Soap bubble.  
columnar epith.*

41. Using the projected radiograph and accompanying photomicrograph, which of the following is the diagnosis of this multilocular radiolucent lesion?

- A. Odontogenic keratocyst
- B. Ameloblastoma
- ☒ C. Central giant cell granuloma ←
- D. Cherubism
- E. Osteitis deformans

*Giant cells present  
thin radiolucent border*

42. Using the projected photograph and accompanying radiograph, which of the following is the **most likely** diagnosis of this multilocular radiolucent lesion?

- A. Odontogenic keratocyst
- B. Ameloblastoma
- ☒ C. Central giant cell granuloma
- ☒ D. Cherubism
- E. Osteitis deformans

*child*

43. Using the projected radiograph and the accompanying photomicrograph, which of the following is the diagnosis of this multilocular radiolucent lesion?

- ☒ A. Odontogenic keratocyst - 6 cells, palisade, etc
- B. Ameloblastoma
- C. Central giant cell granuloma
- D. Cherubism
- E. Osteitis deformans

*post mand  
romulus*



- 44 Using the projected radiograph and accompanying photomicrograph and armed with the knowledge that this patient had hypercalcemia, which of the following is the most likely diagnosis in this case?

→ contains granules

- A. Odontogenic keratocyst
- ☒ B. Hyperparathyroidism ←
- C. Cherubism
- D. Hyperthyroidism
- E. Osteitis deformans

Note:  
Hyper PTH looks  
histo identical to  
CGCG

- 45 Use the projected photograph (a skin lesion was diagnosed as a basal cell carcinoma) and the accompanying radiograph (one cyst-like radiolucency was diagnosed as an OKC) to answer the following question. Which of the following lesions are known to be associated with this syndrome?

- A. Calcification of the falx cerebri
- B. Rib anomalies such as bifid rib ←
- C. Increased head circumference and mild hypertelorism
- ☒ D. All of the above ←
- E. A and C only

- 46 Using the projected radiograph and accompanying photomicrograph, which of the following is the diagnosis of this mixed radiolucent-radiopaque lesion?

- A. Adenomatoid odontogenic tumor
- ☒ B. Calcifying odontogenic cyst
- C. Odontoma
- D. Osteoma
- E. Torus ✕

max anterior

- 47 Using the projected radiograph and two accompanying photomicrographs, which of the following is the diagnosis of this mixed radiolucent-radiopaque lesion?

- A. Ameloblastoma
- ☒ B. Calcifying odontogenic cyst
- C. Odontoma
- D. Rarefying and condensing osteitis
- E. Periapical granuloma

ghost cells

48. Using the projected photograph and accompanying radiograph which of the following is the **most likely** diagnosis of this solitary mixed radiolucent-radiopaque lesion?

- A. ~~Cherubism~~ X
- B. Fibrous dysplasia <
- C. ~~Ameloblastoma~~ X
- D. ~~Odontoma, mature stage~~ X
- E. ~~Rarefying and condensing osteitis~~ X

*ground glass*

49. This patient was a 60 y.o. male, who had hearing and visual problems. His alkaline phosphate was markedly elevated. Using this information and the accompanying two radiograph, which of the following is the **most likely** diagnosis of his condition?

- A. Multiple myeloma
- B. Fibrous dysplasia
- C. Langerhans cell disease
- D. Metastatic carcinoma, probably from the prostate
- E. Paget disease

*cotton wool*

50. This radiograph demonstrates an area of radiopacity at the apex of the maxillary second premolar. The tooth is of normal color and is vital. Which of the following is the **best** diagnosis of this lesion?

- A. ~~Condensing osteitis~~ X
- B. ~~Rarefying and condensing osteitis~~ X
- C. Idiopathic osteosclerosis
- D. ~~Hypercementosis~~
- E. ~~Periapical granuloma~~ X

51. The radiopaque lesion overlying the mandibular canine and extending to the first mandibular premolar, is **most likely** which of the following? The patient is generally in good health.

- A. Torus
- B. ~~Condensing osteitis~~ X
- C. ~~Impacted supernumerary tooth in cleidocranial dysplasia~~ X
- D. ~~An osteoma in a patient with Gardner syndrome~~ X
- E. ~~Periapical cemento-osseous dysplasia~~

- 52 Which of the following is the **most likely** diagnosis of this radiolucent lesion of the mandible with poorly and irregularly defined borders? Also consider the accompanying photomicrograph and the fact that the patient complains of pain and suppuration.

A. Fibrous dysplasia  
B. Metastatic carcinoma  
C. Osteomyelitis ←  
D. Ameloblastoma  
E. Squamous cell carcinoma

*empty lacunae.*

- 53 Which of the following "unique" radiographic appearances is demonstrated in this x-ray? Please, observe the inferior border of the mandible.

A. "ground glass"  
B. "Sunburst"  
C. "cotton-wool"  
D. "onion-skin" ?  
E. "salt and pepper"

*- onion skin*

- 54 Observe the projected clinical photograph and accompanying radiograph. These features are **most consistent** with a diagnosis of which of the following?

A. Sturge-Weber syndrome  
B. Gardner syndrome  
C. Nevroid basal cell carcinoma syndrome  
D. McCune-Albright syndrome  
E. Cleidocranial dysplasia

*No clacile supernumerary*

- 55 Three slides are used to demonstrate this case. Observe the pathology demonstrated in the two clinical photographs (epidermoid cysts and polyp) and in the projected radiograph (multiple separate radiopacities). The features observed in these three slides are **most consistent** with a diagnosis of which of the following syndromes?

A. McCune-Albright  
B. Plummer-Vinson  
C. Sturge-Weber  
D. Gardner  
E. Peutz-Jeghers

56. This lateral skull film is **most consistent** with a diagnosis of which of the following disease? (There is no technical problem with the film)

- A. Osteoporosis
- ☒ B. Osteopetrosis
- C. Multiple myeloma
- D. Osteogenesis imperfecta
- E. Sick cell anemia - hair on end

*marble bone*

57. Which of the following disease entities is **most closely associated** with the projected radiographic pattern?

- A. Osteosarcoma
- ☒ B. Proliferative periostitis
- C. Paget disease
- D. Sick cell anemia
- E. Hyperparathyroidism

*ground glass*

58. Which of the following disease entities is **most closely associated** with the projected radiographic pattern?

- A. Osteosarcoma X
- B. Proliferative periostitis X
- ☒ C. Paget disease ←
- D. Sick cell anemia
- E. Fibrous dysplasia

59. The radiographic pattern shown in this occlusal x-ray of the mandible is termed which of the following?

- A. Cotton-wool
- B. Ground-glass
- ☒ C. Sunburst
- D. Hair-on-end
- E. Tramline

60. The radiographic pattern shown in the previous slide (question # 59) is **most often associated** with which of the following diseases?

- A. Paget disease - cotton wool
- B. Fibrous dysplasia - ground glass
- C. Proliferative periostitis - onion skin
- ☒ D. Osteosarcoma - sunburst
- E. Osteopetrosis - onion skin

Questions 61-1115 (one point each) Multiple choice questions Choose the best answer and indicate your answer on your scantron sheet

61. Which of the following is the most common type of oral mucosal ulcer?
- A. Ulcers associated with cicatricial pemphigoid
  - B. Ulcers resulting from odontogenic infections
  - C. Recurrent aphthous ulcers
  - D. Recurrent herpes ulcers
  - ☒ E. Traumatic ulcers ←
62. Which of the following clinical features is **more consistent** with a diagnosis of recurrent intraoral herpes simplex infection than with recurrent aphthous ulcers, minor type?
- A. Lesions occur most frequently on non-keratinized tissue X *keratinized*
  - B. Lesions usually occur singly
  - ☒ C. Initial lesion begins as a vesicle ✓
  - D. All of the above
  - E. A and C only
63. Which of the following is the site predilection for oral squamous cell carcinoma?
- A. Gingiva
  - ☒ B. Tongue, lateral border ←
  - C. Floor of mouth - *also common*
  - D. Buccal mucosa
  - E. Soft palate
64. Which of the following types of oral leukoplakia has the lowest malignant transformation potential?
- A. Proliferative verrucous leukoplakia *highest*
  - B. Thick, fissured leukoplakia
  - C. Granular leukoplakia
  - ☒ D. Smooth, thin leukoplakia ←
65. All of the following lesions could be fluctuant except one. Which one is the exception?
- A. Hemangioma ✓
  - B. Mucocele ✓
  - ☒ C. Epulis fissuratum X - *Fibrous*
  - D. Abscess ✓

- 66 Which of the following conditions is associated with Epstein-Barr virus (EBV)?
- A. Infectious mononucleosis ✓
  - B. Oral hairy leukoplakia ✓
  - C. Burkitt lymphoma ✓
  - ☒ D. All of the above
  - E. A and C only
- 67 Which of the following disease entities is most often associated with a "ground-glass" radiographic appearance?
- A. Osteosarcoma
  - B. Proliferative periostitis
  - C. Langerhans cell disease
  - D. Paget's disease of bone
  - ☒ E. Fibrous dysplasia
- Fibrous dys. hyper PTH
- 68 Which of the following disease entities is most often associated with an "onion-skin" radiographic appearance?
- A. Osteosarcoma
  - ☒ B. Proliferative periostitis ← *Gonorrhea osteomyelitis*
  - C. Periapical cemento-osseous dysplasia
  - D. Paget's disease of bone
  - E. Fibrous dysplasia
- 69 Which of the following may appear as a soft tissue radiopacity?
- A. Sialolith ✓
  - B. Calcified lymph nodes ✓
  - C. Amalgam tattoo ✓
  - ☒ D. All of the above
  - E. A and C only
- 70 Which of the following may appear as a mixed radiolucent/radiopaque lesion?
- A. Periapical cemento-osseous dysplasia ✓
  - B. Calcifying odontogenic cyst ✓
  - C. Adenomatoid odontogenic tumor ✓ - snowflake
  - ☒ D. All of the above
  - E. A and C only

71. Which of the following is least likely to appear as a multilocular radiolucency?

A. Odontogenic keratocyst

B. Ameloblastoma X

C. Periapical granuloma ← unilocular, ago Hike

D. Odontogenic myxoma

E. Central giant cell granuloma

72. Which of the following may appear as a white lesion than can be scraped off easily?

A. Leukodema

B. Leukoplakia

C. Lichen planus

D. Pseudomembranous candidiasis ←

E. White sponge nevus

73. Which of the following lesions may appear as a unilocular radiolucency?

A. Residual cyst ✓

B. Periapical granuloma ✓

C. Periapical cemento-osseous dysplasia ✓

D. All of the above

E. A and C only

74. All of the following statements are true of the radicular or periapical cyst except. Which is the exception?

A. Is the second most common pulpopariapical lesion after the periapical granuloma T

B. Is the most common of all odontogenic cysts T

C. Can be distinguished radiographically from a periapical granuloma X

D. Can be treated with nonsurgical endodontics if the treatment plan calls for the maintenance of the tooth T

E. An untreated cyst may slowly enlarge and cause expansion the cortical plates T

75. All of the following statements are true of dentigerous cysts except. Which is the exception?

A. Are most common in the posterior mandible T

B. Most commonly appears as a periapical radiolucency ← periapical

C. Signs or symptoms may include delayed eruption of the tooth T

D. Patients are usually over the age of 18 years ✓

E. Most frequently involved tooth is the mandibular third molar T

76. All of the following statements are true of unicystic (mural) ameloblastomas except. Which is the exception?
- A. Occurs most frequently in the posterior mandible T
  - ☒ B. The recurrence rate is the same as for the solid/multicystic ameloblastoma F → just ameloblastoma
  - C. Occurs with about equal frequency in both sexes ~
  - D. May cause delayed tooth eruption
  - E. Most patients are under the age of 30 years T
77. Which cyst occurs when a permanent tooth fails to develop i.e. which cyst occurs in "place of a tooth"?
- ☒ A. Primordial cyst ←
  - B. Residual cyst
  - C. Radicular cyst
  - D. Incisive canal cyst
  - E. Dentigerous cyst
78. Which of the following may occur/appear as solitary cyst-like radiolucency?
- A. Residual cyst T
  - B. Traumatic bone cyst T
  - C. Marrow space T
  - D. Stafne cyst T
  - ☒ E. All of the above
79. All of the statements are true of giant cell lesions of primary hyperparathyroidism except. Which is the exception?
- ☒ A. Is more common in males than females X
  - B. Lesions are more common in mandible ✓
  - C. Patients may manifest kidney stones ✓
  - D. Serum calcium is normally elevated ✓
  - E. Patients are usually over the age of 30 years ✓
80. All of the statements are true of Stafne cyst except. Which is the exception?
- A. Occurs only in the mandible ✓
  - B. Occurs at all ages ✓
  - ☒ C. Teeth are always non-vital X - vital
  - D. Radiolucency usually contains normal salivary gland tissue ✓



81. Which cyst is the one that remains after its associated (usually carious) tooth has been lost?

- ☒ A. Residual ←
- B. Dentigerous
- C. Primordial
- D. Odontogenic keratocyst
- E. Eruption cyst

82. Which feature allows for the diagnosis of an odontogenic keratocyst?

- A. Multilocular radiographic appearance
- ☒ B. Certain histologic features ←
- C. Poorly defined scalloped borders
- D. Non-vital tooth
- E. Association with impacted tooth

83. Basic tissue changes that could produce abnormal red conditions would include which of the following?

- A. Atrophy or erosion of the mucosa T
- B. Accumulation of heavy metals such as lead ? - red line @ margin gingiva.
- C. Vascular dilation because of inflammation T
- ☒ D. All of the above
- E. A and C only

84. Differential diagnoses of erythroplakia would include all of the following except. Which is the exception?

- A. Atrophic candidiasis ✓
- ☒ B. Leukoedema X - white
- C. Erythema multiforme ✓
- D. Macular hemangioma -
- E. Purpuric macule (early stage) ✓

85. Which of the following may be a predisposing condition to oral candidiasis?

- A. Multiple antibiotic regimes T
- B. Sjögren's syndrome - Dry mouth + corticosteroids
- C. Prolonged denture use T
- ☒ D. All of the above
- E. A and C only

86. All of the following statements are true of cicatricial (benign mucous membrane) pemphigoid except. Which is the exception?
- A. While the etiology is unknown, the disease is known to have an autoimmune component T
  - B. Is more common in males under the age of 30 years F ♀ (autoimmune)
  - C. Primarily found on mucous membranes T
  - D. The gingiva is the most common oral site of involvement T - Desquam gingivitis
  - E. Immunofluorescence is an important and useful diagnostic technique ✓
87. All of the following statements are true of tori except. Which is the exception?
- A. Are the most common oral exophytic lesions
  - B. Mandibular tori are located on the lingual aspect of the mandible above the mylohyoid ridge, most often bilaterally in the premolar region ✓
  - C. Palatal tori are located on the soft palate, lateral to the midline F hard @ midline
  - D. In general, tori are slow-growing bony protuberances of the jaw ✓
  - E. Growth occurs mainly during the first 30 years of life ✓
88. All of the following statements are true of epulis fissuratum except. Which is the exception?
- A. Is much more common in males ♀ X
  - B. Can be classified as one of the inflammatory hyperplasias T
  - C. Typically observed at the borders of ill-fitting dentures T
  - D. Is much more common in adults than children T → denture wearers
89. Features common to both recurrent (minor) aphthous ulcers and recurrent intraoral herpes simplex include which of the following?
- begin macules
- A. Frequent occurrence T
  - B. Both begin as vesicles, which then rupture to form an ulcerative lesion F
  - C. Pain T
  - D. All of the above
  - E. A and C only
90. Which of the following lesions is benign?
- A. Osteosarcoma X
  - B. Cementoblastoma
  - C. Squamous cell carcinoma X
  - D. Chondrosarcoma X
  - E. Kaposi sarcoma X

91. All of the following statements are true of mucocoeles except. Which is the exception?
- A. Mucocoeles are one of the most frequent bluish lesions to occur on the lower lip T
  - B. Are usually soft and fluctuant T
  - C. Mucocoeles cannot be emptied by digital pressure T
  - D. Mucocoeles are most common on the anterior hard palate F - lower lip
  - E. Some mucin-producing salivary gland tumors can mimic a mucocoele clinically T
92. McCune-Albright syndrome is a developmental defect of unknown cause that often manifests which of the following?
- A. Cafe-au-lait macules (spots) ✓
  - B. Neurofibromas X
  - C. Precocious puberty in girls ✓
  - D. All of the above
  - E. A and C only
- + fibrous dysplasia
93. Which of the following is most closely associated with Gardner syndrome?
- A. Osteomas ✓
  - B. Neurofibromas - Von Recklinghaus
  - C. Odontogenic keratocysts - basal cell nevus synd.
  - D. Fibrous dysplasia - McCune
  - E. "Tram-line calcifications" ?
94. All of the following statements are true of osteosarcoma (osteogenic sarcoma) except. Which is the exception?
- A. May appear as a bandlike widening of the periodontal ligament space and this is pathognomonic for the disease F
  - B. Radiographically may show a "sunburst" or "sunray" appearance T
  - C. Pain, swelling, paresthesia or anesthesia and tooth mobility may occur T
  - D. Is second to multiple myeloma and lymphoma as the most frequently encountered primary tumor of the jawbones T
  - E. The average age of onset is in the third to fourth decade T 20s-30s
95. All of the following statements are true of fibrous dysplasia except. Which is the exception?
- A. Is considered a hamartomatous fibro-osseous lesion
  - B. The etiology is unknown T
  - C. Depending upon the stage may appear as a radiolucent, mixed radiolucent/radiopaque, or radiopaque lesion T
  - D. Is best treated by radiation therapy F
  - E. Is basically a disease of children, adolescents and young adults T

96 Which of the following are clinical features associated with the basal cell nevus syndrome?

- A. Jaw cysts, which often are parakeratotic OKCs T
- B. Basal cell carcinomas T
- C. Skeletal abnormalities such as bifid ribs, kyphoscoliosis, and hypertelorism T
- ☒ D. All of the above
- E. A and C only

97 All of the following statements are true of Langerhans cell disease except. Which is the exception?

- A. Was formally known as Neimann-Pick disease *Histiocytosis X*
- B. Lesions may appear as multiple separate, well-defined radiolucencies T *...punched out!*
- ☒ C. Although the etiology is unknown, immunologic defects have been implicated *← ? genetic*
- D. Teeth may appear to be "floating in air" T

98 Which of the following are associated with primary hyperparathyroidism?

- A. Metastatic calcifications may occur *→ ex. kidney stones ?*
- B. Serum calcium and phosphorus levels are typically normal F
- C. Generalized rarefaction of the jaws may occur along with a loss of lamina dura (10% of cases) ✓
- ☒ D. All of the above
- ☒ E. A and C only

99 All of the following statements is true of sickle cell anemia except. Which is the exception?

- ☒ A. Is a hereditary disease caused by a point mutation T
- ☒ B. A "hair-on-end" radiographic appearance is pathognomonic for the disease F *also Thalassemia*
- C. Patients may exhibit pallor, fatigue, weakness and dyspnea T
- D. Patients are susceptible to infections T

100 All of the following statements are true of osteoporosis except. Which is the exception?

- A. May present as a generalized rarefaction of the jawbones T
- B. May be drug induced T
- ☒ C. Is also known as osteomalacia F *→*
- D. Is more common in postmenopausal females

101 All of the following statements are true of Paget disease of bone except. Which is the exception?

- A. Depending upon the stage it may be radiolucent, mixed radiolucent/radiopaque or radiopaque T
- ☒ B. Serum alkaline phosphatase levels are markedly low; in fact lower than in any other disease F *elevated*
- C. Teeth may show hypercementosis T
- D. Is more common in patients over the age of 40 years T
- E. Is more common in the maxilla T

102 All of the following statements are true of multiple myeloma except. Which is the exception?

- A. Is the most common primary malignant tumor of bone T
- B. Is characterized by the proliferation of abnormal plasma cells T
- ☒ C. Patients often complain that their dentures are too small as well as their hats F *Page's*
- D. Radiographically may manifest multiple separate well-defined radiolucencies T
- E. Hypercalcemia, amyloidosis and pancytopenia may be seen T

103 Which oral lesion(s) may reflect the presence of a parathyroid adenoma?

- A. Loss of lamina dura T
- B. Lesions microscopically resembling central giant cell granuloma T
- C. Brown tumor T
- ☒ D. All of the above
- E. None of the above

104 Which of the following statements is true of the oral papilloma?

- ☒ A. Has high potential for malignant transformation F
- B. Is cauliflower-like (warty) in appearance T
- C. Is known to be caused by the Epstein-Barr Virus F
- D. Will invade adjacent tissue F
- E. All are true of oral papillomas

105 Which of the following statements is true of the oral irritation (traumatic) fibroma?

- A. Most are considered to be reactive lesions rather than true neoplasms T
- B. Often undergo malignant transformation to a fibrosarcoma F
- C. Generally, appear as smooth, firm exophytic masses T
- D. All of the above
- ☒ E. A and C only

106. In which way does epithelial dysplasia always differ from epidermoid (squamous cell) carcinoma? *in situ*
- A. Degree of keratinization present
  - B. Degree of whiteness
  - C. Size of lesion
  - ☒ D. Invasion into underlying tissue ←
  - E. Common intraoral location
107. Which oral lesion has the greatest malignant potential?
- ☒ A. A velvety red patch with no known cause ✓
  - B. A white patch on an edentulous ridge X
  - C. A white patch adjacent to a fractured amalgam X
  - D. A fibroma at the occlusal plane X
108. Which of the following types of melanoma does not have a radial (lateral) growth phase?
- ☒ A. Nodular → *vertical only*
  - B. Superficial spreading
  - C. Lentigo maligna
  - D. Acral lentiginous
  - E. Oral
109. Osteosarcoma of the jaw radiographically may show which of the following appearances?
- A. Cortical destruction ✓
  - B. Altered trabeculation ✓
  - C. Symmetrically widened PDL space ✓
  - ☒ D. Displaced teeth ✓
  - ☒ E. All of the above
110. Which of the following radiographic appearances is most commonly associated with multiple myeloma?
- A. Ground glass appearance X
  - B. Peas-in-a pod radiolucency X
  - ☒ C. Punched-out radiolucency ←
  - D. Cotton wool radiopacity
  - E. All of the above as it depends upon the stage of the lesion

ORAL DIAGNOSIS  
DEND 329

FINAL EXAMINATION

NAME \_\_\_\_\_

DECEMBER 9, 2004

STUDENT NO. \_\_\_\_\_

THIS EXAMINATION CONSISTS OF 100 QUESTIONS. PLEASE, FOLLOW THE INSTRUCTIONS FOR EACH SECTION.

Questions 1-50 (one point each) Choose the best answer based upon the description and projection presented, and indicate the answer on your scantron sheet.

1. Based upon the radiographic appearance and projected photomicrograph, what is the **most likely** diagnosis of the radiolucency observed at the root apex of this non-vital tooth?  
  - A. Periapical abscess
  - ☒ B. Periapical granuloma
  - C. Periapical cyst
  - D. Periapical osteitis
  - E. Periapical cemento-osseous dysplasia
2. Which of the following would **least likely** be included in a differential diagnosis of this gingival swelling which as generally firm in consistency?  
  - A. Pyogenic granuloma
  - ☒ B. Minor salivary gland tumor
  - C. Peripheral giant cell granuloma
  - D. Peripheral ossifying fibroma
  - E. Focal inflammatory fibrous hyperplasia
3. This solitary cyst-like radiolucency was discovered on routine radiographic examination of the patient's jaws. This radiolucency would **most** likely be which of the following lesions?  
  - A. Radicular cyst
  - B. Multiple myeloma
  - C. Traumatic bone cyst
  - ☒ D. Stafne cyst
  - E. Residual cyst

4. A multilocular radiolucent lesion of the mandibular molar-ramus region was explored and tissue submitted for microscopic examination. A photomicrograph is shown of this tissue. The **clinical** significance of the diagnosis made from this examination would be which of the following? *OKC*  
  - A. The necessity for radical surgical excision and lymph node dissection
  - B. A high risk of malignant transformation of this lesion
  - ☒ C. A high recurrence rate for this lesion
  - D. The need for immediate antibiotic therapy to prevent high morbidity and mortality
  - E. Radiation therapy must begin immediately to prevent spread of this lesion
5. This asymptomatic radiolucency was discovered during routine examination of a "new" patient. You sent the patient to your favorite oral surgeon for diagnosis and treatment. He reports to you that he found "essentially nothing" in the radiolucent area. Which of the following will be the **most likely** diagnosis of this lesion?  
  - A. Dentigerous cyst
  - B. Aneurysmal bone cyst
  - C. Periapical cementoosseous dysplasia, early stage
  - ☒ D. Traumatic bone cyst
  - E. Stafne cyst
6. Which of the following is the **most likely** diagnosis of this slow-growing, soft mass that had been present for "a year or so"?  
  - ☒ A. Papilloma
  - B. Fibrous hyperplasia/fibroma
  - C. Mucocele
  - D. Pyogenic granuloma
  - E. Squamous cell carcinoma
7. Which of the following should be at the **top** of a list of differential diagnoses of this pericoronal radiolucency?  
  - A. Adenomatoid odontogenic tumor
  - B. Unicystic ameloblastoma
  - C. Radicular cyst
  - ☒ D. Normal follicular space
  - ☒ E. Dentigerous cyst

8. The radiolucencies found at the apices of this vital mandibular molar tooth are **most** likely which of the following?
- A. Periapical granulomas
  - B. Periapical cysts
  - C. Periapical abscesses
  - ☒ D. Dental papillae
  - E. Periapical cementoosseous dysplasia
9. The patient in this case indicated that she had had similar lesions at the same site previously and that they healed in a "couple of weeks". These lesions, which began as "blisters", were described as quite painful. Which of the following lesions should head your list of differential diagnoses?
- ☒ A. Recurrent herpes simplex infection
  - B. Recurrent aphthous ulcer
  - C. Ectopic geographic tongue
  - D. Cicatricial pemphigoid
  - E. Erythema multiforme, minor
10. This teenage patient and her mother were concerned that her permanent canine had not replaced her "baby" tooth. A radiograph of this area is projected. Which of the following should head a list of differential diagnoses of this lesion?
- A. Traumatic bone cyst
  - ☒ B. Solid/multicystic ameloblastoma
  - C. Unicystic ameloblastoma ?
  - D. Adenomatoid odontogenic tumor
  - E. Pindborg tumor
11. The unique radiographic appearance demonstrated in this occlusal radiograph is **most** commonly associated with which of the following diseases?
- A. Proliferative periostitis
  - ☒ B. Osteosarcoma
  - C. Fibrous dysplasia
  - D. Paget disease
  - E. Osteopetrosis

12. In taking a full-mouth set of radiographs in the admitting clinic, you observed areas of radiolucency at the apices of the mandibular incisor teeth. The teeth had a normal appearance and tested vital. Which of the following is the **most likely** diagnosis of these periapical radiolucencies?
- A. Periapical abscesses
  - B. Periapical granulomas
  - C. Periapical cysts
  - D. Periapical scar
  - ☒ E. Periapical cementoosseous dysplasia
13. Which of the following is the **most** likely diagnosis of the vestibular soft tissue mass observed in this denture wearer?
- A. Verrucous carcinoma
  - B. Inflammatory papillary hyperplasia
  - ☒ C. Epulis fissuratum
  - D. Epulis granulatosum
  - E. Hyperplastic candidiasis
14. The unique radiographic appearance observed in this radiograph is **most** closely associated with which of the following diseases?
- ☒ A. Fibrous dysplasia
  - B. Osteopetrosis
  - C. Osteitis deformans
  - D. Proliferative periostitis
  - E. Sickle cell anemia
15. The patient in this case had purplish skin lesions particularly on her arms and the projected red and white lesions of the buccal mucosa bilaterally. These lesions are **most likely** which of the following?
- ☒ A. Lichen planus
  - B. Leukoedema
  - C. Erythema migrans
  - D. Cicatricial pemphigoid
  - E. Leukoplakia



16. The patient in this case had had a series of infections, felt “tired and run-down”, and was experiencing back pain. The projected lateral skull film demonstrated multiple, well-defined areas of radiolucency. These clinical and radiographic features are **most** consistent with a diagnosis of which of the following?

A. Paget disease  
☒ B. Multiple myeloma  
C. Primary hyperparathyroidism  
D. Osteosarcoma  
E. Fibrous dysplasia

17. This bluish swelling of the right side of the floor of the mouth has been present for approximately three days. This lesion is **most likely** which of the following?

A. Dermoid cyst  
B. Hemangioma  
☒ C. Ranula  
D. Lymphangioma  
E. Melanoma

18. The areas of discoloration adjacent to the mandibular second premolar tooth observed in this photograph had not change in the four years they were known to be present. These areas are **most likely** which of the following?

☒ A. Amalgam tattoos  
B. Melanomas  
C. Oral melanotic macules  
D. Hematomas  
E. Mucous retention cysts

19. This radiograph demonstrates a tooth “floating in air” in a 10 y.o. male patient. In addition to the bony lesion, the patient manifested exophthalmos and diabetes insipidus. This is **most likely** a case of which of the following?

A. Sickle cell anemia  
B. Ewing’s sarcoma  
C. Multiple myeloma  
☒ D. Langerhans cell disease  
E. Thalassemia

20. The projected radiograph is that of a 77 y.o. female, who fractured her hip last year. She has complained of back pain for several years and has a “hunch-back”. This history and radiographic appearance of the mandible are **most consistent** with which of the following disease entities?

A. Osteosarcoma  
B. Osteopetrosis  
☒ C. Osteoporosis  
D. Metastatic carcinoma  
E. Polyostotic fibrous dysplasia

21. This patient wears her complete dentures almost constantly. The elevated warty lesions of the palatal vault are **most likely** which of the following?

A. Papilloma  
☒ B. Papillary hyperplasia  
C. Necrotizing sialometaplasia  
D. Candidiasis  
E. Epulis fissuratum

22. A physician friend sends you this patient with the accompanying radiograph noting the patient needs new dentures as his old ones no longer fit. You quickly note the patient is wearing a hearing aid and has some problems with his sight. Based upon this clinical information and the accompanying radiograph you suspect the patient may be suffering from which of the following?

A. Polyostotic fibrous dysplasia  
B. Osteoporosis  
C. Osteopetrosis  
☒ D. Osteitis deformans  
E. Osteosarcoma

23. Which of the following is **most likely** blocking the eruption of the maxillary incisor observed in this projected radiograph?

A. An osteoma  
☒ B. An odontoma  
C. A dentigerous cyst  
D. An osteosarcoma  
E. A periapical cementoosseous dysplasia

24. The mixed radiolucent-radiopaque lesions found at the apices of the mandibular first molar in this projected radiograph are **most** consistent with a diagnosis of which of the following?

- A. Pindborg tumor
- ☒ B. Rarefying and condensing osteitis
- C. Calcifying odontogenic cyst
- D. Odontoma, intermediate stage
- E. Periapical scar

25. Observe the periapical lesion(s) in this projected radiograph. The teeth are vital. Which of the following is the **most likely** diagnosis?

- A. Rarefying and condensing osteitis
- B. Osteomyelitis
- C. Odontoma
- ☒ D. Periapical cementoosseous dysplasia
- E. Osteitis deformans

26. This radiograph demonstrates which of the following conditions?

- A. Cementoblastoma
- B. Idiopathic osteosclerosis
- C. Condensing osteitis
- D. Artifact
- ☒ E. Hypercementosis

27. Which of the following is the **most likely** diagnosis of the radiopacity observed in this radiograph?

- ☒ A. Mandibular torus
- B. Idiopathic osteosclerosis
- C. Hypercementosis
- D. Proliferative periostitis
- E. Condensing osteitis

28. Which of the following is the **most likely** diagnosis of the radiopacity observed in this radiograph?

- A. Hypercementosis
- ☒ B. Idiopathic osteosclerosis
- ☒ C. Condensing osteitis
- D. Proliferative periostitis - *Canine*
- E. Complex odontoma

29. What is the **most likely** diagnosis of the bluish-black areas observed on the ventral surface of this tongue?

- A. Melanoplakia
- B. Median rhomboid glossitis
- ☒ C. Lingual varices
- D. Melanoma
- E. Erythema migrans

30. Using the radiographic image and the projected photomicrograph, which of the following is the correct diagnosis in this case?

- ☒ A. Periapical cyst
- B. Periapical granuloma
- C. Periapical cemento-osseous dysplasia
- D. Dentigerous cyst
- D. Hypercementosis

31. All of the following would be considered in the differential diagnosis of this multilocular radiolucent lesion **except**. Which one would **not** be included in the differential?

- A. Odontogenic keratocyst
- B. Ameloblastoma
- C. Central giant cell granuloma
- ☒ D. Odontoma
- E. Odontogenic myxoma

32. Using the projected radiograph and a history of pain, swelling and redness, which of the following is the **most likely** diagnosis in this case?
- A. Fibrous dysplasia
  - ☒ B. Osteomyelitis
  - C. Florid cementoosseous dysplasia
  - D. Osteopetrosis
  - E. Osteitis deformans
33. Using the projected radiograph and the accompanying photomicrograph, which of the following is the diagnosis of this multilocular radiolucent lesion?
- ☒ A. Odontogenic keratocyst
  - ☒ B. Ameloblastoma
  - C. Central giant cell granuloma
  - ☒ D. Cherubism
  - E. Osteitis deformans
34. This patient had the projected bony lesions of the jaw, one of which had been diagnosed as central giant cell granuloma and a history of kidney stones, abdominal and bone pain and depression? These findings suggest the patient may really be suffering from which of the following?
- A. Osteopetrosis
  - B. Osteoporosis
  - ☒ C. Hyperparathyroidism
  - D. Paget disease
  - E. Multiple myeloma
35. You observed the skin lesions shown in the accompanying photograph and the patient tells you she was diagnosed with skin cancer. In your physical evaluation, you note the projected bony lesions on radiograph. First and foremost, this patient should be evaluated for which of the following disease entities?
- A. Cleidocranial dysplasia
  - B. Peutz-Jeghers syndrome
  - ☒ C. Nevoid basal cell carcinoma syndrome
  - D. Gardner syndrome
  - E. Ascher syndrome

36. The firm swelling of the buccal mucosa projected in this photograph is **most** consistent with a diagnosis of which of the following?
- A. Papilloma
  - ☒ B. Mucocele
  - C. Fibroma/fibrous hyperplasia
  - D. Osteoma
  - E. Hemangioma
37. Which of the following “unique” radiographic appearances is demonstrated in this x-ray?
- A. “ground glass”
  - B. “Sunburst”
  - C. “cotton-wool”
  - ☒ D. “onion-skin”
  - E. “salt and pepper”
38. After observing the projected radiograph, you further question the patient. During this conversation, he strikes the pose shown in the accompanying photograph. These features are **most consistent** with a diagnosis of which of the following?
- A. Sturge-Weber syndrome
  - B. Gardner syndrome
  - C. Nevoid basal cell carcinoma syndrome
  - D. McCune-Albright syndrome
  - ☒ E. Cleidocranial dysplasia
39. The patient in this case has a history of cancer of the colon at an early age. He relates this “runs in his family”. After taking radiographs to evaluate swellings at the angles of the mandible, you suspect the patient has which of the following?
- ☒ A. Gardner syndrome
  - B. Plummer-Vinson syndrome
  - ☒ C. Peutz-Jeghers syndrome
  - D. Nevoid basal cell carcinoma syndrome
  - E. McCune-Albright syndrome

40. Assuming that this radiograph has been taken and developed properly, this lateral skull film is **most consistent** with a diagnosis of which of the following disease?
- A. Osteogenesis imperfecta
  - B. Osteoporosis
  - C. Multiple myeloma
  - ☒ D. Osteopetrosis
  - E. Sickle cell anemia
41. The lesions observed on the tongue of this patient have been known to disappear only to reappear in another location. Which of the following is the **most** likely diagnosis?
- A. Median rhomboid glossitis
  - ☒ B. Erythema migrans
  - C. Hairy tongue
  - D. Hairy leukoplakia
  - E. Lymphangioma
42. Which of the following disease entities is **most closely associated** with the projected radiographic pattern?
- A. Osteosarcoma
  - B. Proliferative periostitis
  - C. Paget disease
  - ☒ D. Sickle cell anemia
  - E. Hyperparathyroidism
43. Which of the following is the **most** likely diagnosis of this solitary, asymptomatic, cyst-like radiolucency discovered on routine radiographic examination?
- ~~A. Stafne cyst~~
  - B. Traumatic bone cyst
  - ☒ C. Residual cyst
  - D. Dentigerous cyst
  - E. Periapical cementoosseous dysplasia

44. This white condition is observed bilaterally and disappears when stretched. It is **most** likely which of the following?
- A. Leukoplakia
  - ☒ B. Leukoedema
  - C. Leukemia
  - D. Leukomoid reaction
  - E. Lichenoid drug reaction
45. Which of the following should be considered in the differential diagnosis of the unilateral lesion shown in the projected radiograph? This a 38 y.o. female with no other medical problems.
- ~~A. Odontoma, mature stage~~
  - ~~B. Osteoma~~
  - ☒ C. Odontogenic keratocyst
  - ~~D. Cherubism~~
  - E. Primary hyperparathyroidism
46. Management of the yellowish-white papules observed on the buccal mucosa of this patient would consist of which of the following?
- A. Surgical excision
  - B. Antibiotic therapy
  - C. Antifungal therapy
  - ☒ D. Observation as no treatment is required
  - E. Radiation therapy
47. Which of the following is the correct diagnosis of the mixed radiolucent-radiopaque lesion observed in this radiograph and two accompanying photomicrograph?
- A. Ameloblastoma
  - B. Dentigerous cyst
  - ☒ C. Calcifying odontogenic cyst *Cherubism*
  - D. Periapical cementoosseous dysplasia
  - ~~E. Odontoma~~

48. The current standard of care for the lesion observed in the following radiograph and photomicrograph is which of the following?
- ☒ A. Marginal resection with at least 1 cm margin
  - B. Radical surgical resection with lymph node dissection
  - C. Radiation therapy
  - D. Curettage
  - E. Radical surgical resection followed by chemotherapy
49. Which of the following lesions should be at the top of your list of differential diagnoses of the pericoronal radiolucency shown in the projected radiograph?
- A. Radicular cyst
  - ☒ B. Dentigerous cyst
  - C. Odontogenic keratocyst
  - D. Adenomatoid odontogenic cyst
  - E. Calcifying odontogenic cyst
50. Causes associated with the lesion observed at the corners of the mouth in this photograph include which of the following?
- ☒ A. Pooling of the saliva because of over-closure of the mouth due to loss of vertical dimension
  - B. Vitamin D deficiency
  - C. *Candida albicans* infection
  - ☒ D. All of the above
  - E. A and C only

**Questions 51-100 (one point each)** Multiple choice questions. Choose the best answer and indicate your answer on your scantron sheet.

51. Which of the following is true of periapical cementoosseous dysplasia?
- ☒ A. Most commonly appears at the apex of a permanent maxillary incisor
  - B. Most often associated with a non-vital tooth
  - ☒ C. May appear as a mixed radiolucent-radiopaque lesion
  - D. Is the most common pulpoperiapical pathologic radiolucency
  - E. Is most common in the 5-20 year age bracket

52. Which of the following is the **most** common oral **mucosal** ulcer?
- A. Recurrent herpes ulcer
  - ☒ B. Traumatic ulcer
  - C. Recurrent aphthous ulcer
  - D. An ulcer from an odontogenic infection
  - E. An ulcer of erosive lichen planus
53. Which of the following is suggestive of a non-vital pulp?
- A. A dark hue of the crown
  - B. A fracture of the crown or root
  - C. A draining sinus tract from the tooth
  - ☒ D. All of the above
  - E. A and C only
54. Which of the following has a **maxillary jaw** predilection?
- A. Odontogenic keratocyst
  - ☒ B. Stafne cyst
  - ☒ C. Residual cyst
  - D. Traumatic bone cyst
  - E. Dentigerous cyst
55. Which of the following is **not** a true cyst?
- A. Stafne cyst
  - B. Radicular cyst
  - C. Traumatic bone cyst
  - D. All of the above
  - ☒ E. A and C only
56. Which of the following is **most** likely to appear as a **pericoronal** radiolucency?
- A. Radicular cyst
  - ☒ B. Periapical granuloma
  - ☒ C. Dentigerous cyst
  - D. Condensing osteitis
  - E. Stafne cyst

57. Which of the following statements is true of Paget disease?

- ☐ A. Patients are at increased risk for developing osteosarcoma
- ☐ B. In the mature stage, Paget disease often presents with a cotton-wool appearance on radiograph
- ☐ C. Alkaline phosphatase levels are typically elevated
- ☒ D. All of the above
- ☐ E. A and C only

58. Which of the following salivary glands/ducts is **most** frequently involved in cases of sialolithiasis?

- A. Minor salivary glands
- B. Parotid
- ☒ C. Submandibular
- D. Sublingual

59. Which of the following can be classified as a mixed radiolucent-radiopaque lesion not necessarily contacting teeth?

- A. Focal cementoosseous dysplasia
- B. Dentigerous cyst
- ☒ C. Fibrous dysplasia
- D. All of the above
- E. A and C only

60. Which of the following may appear as a **periapical mixed** radiolucent-radiopaque lesion associated with teeth?

- ☐ A. Periapical cementoosseous dysplasia, intermediate stage
- ☐ B. Ameloblastoma
- ☐ C. Rarefying and condensing osteitis
- ☒ D. All of the above
- ☐ E. A and C only

61. Which of the following statements is true of **compound odontomas**?

- ☐ A. Are more common in the maxilla
- ☐ B. Are more common in the 5-20 year age bracket
- ☐ C. Generally, appear as radiolucent-radiopaque lesions containing what appear as small tooth-like structures
- ☒ D. All of the above
- ☐ E. A and C only

62. Which of the following is **most** likely to cause the "hair-on-end" appearance on radiograph?

- A. Proliferative periostitis
- B. Multiple myeloma
- ☒ C. Thalassemia
- D. Paget disease
- E. Osteopetrosis

63. Which of the following clinical features is **more consistent** with a diagnosis of **recurrent aphthous ulcers, minor type** than with recurrent intraoral herpes simplex infection?

- A. Lesions occur most frequently on keratinized tissue
- ☒ B. Lesions usually occur singly
- C. Initial lesion begins as a vesicle
- D. All of the above
- E. A and C only

64. Which of the following is the site predilection for oral squamous cell carcinoma?

- A. Gingiva
- B. Buccal mucosa
- C. Floor of mouth
- D. Tongue, dorsal surface
- ☒ E. Tongue, lateral border

65. Which of the following types of oral leukoplakia has the **highest** malignant transformation potential?

- ☒ A. Proliferative verrucous leukoplakia
- B. Thick, fissured leukoplakia
- C. Granular leukoplakia
- D. Smooth, thin leukoplakia

66. Which of the following lesions can be soft and fluctuant?

- A. Hemangioma
- B. Mucocele
- C. Abscess
- ☒ D. All of the above
- ☐ E. A and C only

67. Which of the following conditions has been directly associated with Epstein-Barr virus (EBV)?

- ☐ A. Systemic lupus erythematosis
- ☐ B. Oral hairy leukoplakia
- ☐ C. Kaposi sarcoma
- ☒ D. All of the above
- E. A and C only

68. Which of the following may appear as a **soft tissue** radiopacity?

- ☐ A. Amalgam tattoo
- ☐ B. Calcified lymph nodes
- ☐ C. Phebolith
- ☒ D. All of the above
- E. A and C only

69. Which of the following may appear as a mixed radiolucent/radiopaque lesion?

- ☐ A. Periapical cemento-osseous dysplasia
- ☐ B. Adenomatoid odontogenic tumor
- ☐ C. Odontoma
- ☒ D. All of the above
- E. A and C only

70. Which of the following is **least likely** to appear as a multilocular radiolucency?

- ☒ A. Radicular cyst
- ☐ B. Ameloblastoma
- ☐ C. Cherubism
- ☐ D. Odontogenic myxoma
- ☐ E. Central giant cell granuloma

71. Which of the following lesions may appear as a unilocular radiolucency?

- ☐ A. Periapical cementoosseous dysplasia
- ☐ B. Periapical granuloma
- ☐ C. Periapical abscess
- ☒ D. All of the above
- E. A and C only

72. All of the following statements are true of the periapical or apical periodontal cyst **except**. Which is the **exception**?

- ☒ A. Is the most common pulpoperiapical lesion
- ☐ B. Is the most common of all odontogenic cysts
- ☐ C. Can **not definitively** be distinguished radiographically from a periapical granuloma
- ☐ D. Can be treated with non-surgical endodontics if the treatment plan calls for the maintenance of the tooth
- ☐ E. An untreated cyst may slowly enlarge and cause expansion the cortical plates

73. Which of the following is the correct management of a lesion suspected to be a Stafne cyst?

- ☐ A. Surgical enucleation
- ☒ B. Periodic observation as no treatment is required
- ☐ C. Block resection
- ☐ D. Radiation therapy
- ☐ E. Injection of a sclerosing agent

74. Squamous cell carcinoma of the oral cavity is **most** closely associated with which of the following?

- ☐ A. Alcohol abuse
- ☐ B. Avitaminosis A
- ☒ C. Tobacco usage
- ☐ D. Infection with *Candida albicans*
- ☐ E. Syphilis

75. All of the following statements are true of dentigerous cysts **except**. Which is the **exception**?

- ☐ A. Are most common in the posterior mandible
- ☒ B. Most commonly appears as a mixed radiolucency-radiopacity
- ☐ C. Signs or symptoms may include delayed eruption of the tooth
- ☐ D. Are also known as follicular cysts
- ☐ E. Surgical excision is treatment of choice

76. All of the statements are true of giant cell lesions of **primary** hyperparathyroidism **except**. Which is the **exception**?
- ☐ A. Is more common in females
  - ☐ B. Generally caused by a functional parathyroid adenoma or hyperplasia
  - ☐ C. Patients may manifest kidney stones
  - ☐ D. Serum calcium levels are lower than normal
  - ☐ E. Patients are usually over the age of 30 years
77. Which cyst is the one that remains after its associated (usually carious) tooth has been lost?
- A. Radicular
  - B. Dentigerous
  - ☒ C. Residual
  - D. Odontogenic keratocyst
  - E. Primordial
78. Which feature allows for the definitive diagnosis of an odontogenic keratocyst?
- A. Multilocular radiographic appearance
  - B. Association with a tooth
  - C. Poorly defined scalloped borders
  - D. Non-vital tooth
  - ☒ E. Pathognomonic microscopic features
79. Basic tissue changes that could produce abnormal white conditions would include which of the following?
- ☐ A. Marked intracellular edema
  - ☐ B. Erosion of the epithelium
  - ☐ C. Increased thickness of the keratin layer
  - ☒ D. All of the above
  - ☐ E. A and C only
80. Predisposing conditions for oral candidiasis included which of the following?
- ☐ A. Prolonged denture use
  - ☐ B. Sjögren's syndrome
  - ☐ C. Prolonged steroid use
  - ☐ D. All of the above
  - ☐ E. A and C only

81. Which of the following is true of tori?
- ☐ A. Are the most common oral exophytic lesions
  - ☐ B. Palatal tori are located on the soft palate, lateral to the midline
  - ☐ C. In general, tori are slow-growing bony protuberances of the jaw
  - ☐ D. All of the above
  - ☒ E. A and C only
82. Which of the following statements is true of mucocoeles?
- ☐ A. Mucocoeles are one of the most frequent bluish lesions to occur on the lower lip
  - ☐ B. Mucocoeles are most common on the gingiva
  - ☐ C. Some mucin-producing salivary gland tumors can mimic a mucocoele clinically
  - ☐ D. All of the above
  - ☒ E. A and C only
83. Manifestations of McCune-Albright syndrome include which of the following?
- A. Cafe-au-lait macules (spots)
  - B. Polyostotic fibrous dysplasia
  - C. Precocious puberty in girls
  - ☒ D. All of the above
  - ☐ E. A and C only
84. Which of the following is **most closely** associated with Gardner syndrome?
- A. Fibrous dysplasia
  - B. Neurofibromas
  - C. Odontogenic keratocysts
  - ☒ D. Supernumerary teeth
  - ☐ E. "Tram-line calcifications"
85. Which of the following statements is true of osteosarcoma of the jaws?
- ☐ A. Radiographically may show a "sunburst" or "sunray" appearance
  - ☐ B. Pain, swelling, paresthesia or anesthesia and tooth mobility may occur
  - ☐ C. Is second to multiple myeloma and lymphoma as the most frequently encountered primary tumor of the jawbones
  - ☒ D. All of the above
  - ☐ E. A and C only



86. Which of the following is associated with a thickened periodontal ligament or widening of the periodontal ligament space?
- A. Osteosarcoma
  - B. Periapical cyst
  - C. Systemic sclerosis (scleroderma)
  - ☒ D. All of the above
  - E. A and C only
87. Which of the following diseases commonly present as radiolucencies with poorly defined and/or ragged borders?
- ☒ A. Osteomyelitis
  - B. Compound odontomas
  - C. Osteopetrosis
  - D. All of the above
  - E. A and C only
88. Which of the following statements is true of osteoporosis?
- ☒ A. Is more common in females after menopause
  - B. May be drug induced
  - C. May cause a generalized rarefaction of the jaws
  - D. All of the above
  - E. A and C only
89. Which of the following statements is true of odontogenic keratocysts?
- A. Site of predilection is the anterior maxilla
  - B. A definitive diagnosis can be made by its characteristic radiographic appearance
  - ☒ C. The parakeratinized type recurs more commonly than the orthokeratinized type
  - D. Appears most commonly as an ill-defined radiolucency
  - E. Often undergoes malignant change
90. According to your textbook (and reinforced in class), there are seven distinct periapical radiolucent lesions that are sequelae of pulpitis. These include all of the following **except**. Which one is the **exception**?
- A. Apical periodontal cyst or periapical cyst
  - ☒ B. Dentigerous cyst
  - C. Osteomyelitis
  - D. Periapical abscess
  - E. Periapical scar

91. In which way does epithelial dysplasia differ from epidermoid carcinoma?
- A. Site of predilection
  - B. Size of the lesion
  - ☒ C. Invasion into the underlying tissue
  - D. Degree of whiteness or redness
  - E. Degree of keratinization present
92. Which of the following statements is true of multiple myeloma?
- ☒ A. Some signs/symptoms may result from an underlying pancytopenia
  - ☒ B. Is characterized by the proliferation of abnormal plasma cells
  - ☒ C. Radiographically, may manifest multiple separate well-defined radiolucencies
  - ☒ D. All of the above
  - E. A and C only
93. Which oral lesion has the greatest malignant potential?
- ☒ A. A velvety red patch with no known cause
  - B. A white patch on an edentulous ridge
  - C. A white patch adjacent to a fractured amalgam
  - D. A fibroma at the occlusal plane
94. Osteosarcomas radiographically may show which of the following appearances?
- ☒ A. Altered trabeculation
  - ☒ B. Cortical destruction
  - ☒ C. Symmetrically widened PDL space
  - ☒ D. All of the above
  - E. A and C only
95. Which of the following is the most common periapical radiolucency?
- ☒ A. Periapical granuloma
  - B. Radicular (apical periodontal) cyst
  - C. Periapical cementosseous dysplasia
  - D. Periapical abscess
  - E. Periapical scar

96. Odontomas are usually discovered because of which of the following reasons?
- ☒ A. They prevent tooth eruption
  - ☐ B. They become infected
  - ☐ C. They produce pain
  - ☐ D. They produce a marked swelling
  - ☐ E. They occur in families
97. Which of the following lesions would have a predilection for patients **under the age of 30 years**?
- ☒ A. Cherubism
  - ☐ B. Multiple myeloma
  - ☐ C. Paget disease
  - ☐ D. Primary hyperparathyroidism
  - ☐ E. Metastatic carcinoma to the jaws
98. Which of the following statements is true of dentigerous cysts?
- ☐ A. Occurs between the roots of two erupted adjacent teeth
  - ☒ B. Occurs around the crown of an unerupted tooth
  - ☐ C. Occurs at the apex of an erupted tooth
  - ☐ D. Occurs in place of a tooth
  - ☐ E. All of the above
99. Which of the following statements is true of the solid/multicystic ameloblastoma?
- ☐ A. Usually appear as a multilocular radiolucency
  - ☐ B. Has a predilection for the posterior mandible
  - ☐ C. Cells proliferate as nests and islands of epithelium resembling enamel organ
  - ☒ D. All of the above
  - ☐ E. A and C only
100. Periapical cementoosseous dysplasia is most likely to be clinically and radiographically misdiagnosed as which of the following?
- ☐ A. Ameloblastoma
  - ☒ B. Periapical granuloma
  - ☐ C. Fibrous dysplasia
  - ☐ D. Multiple myeloma
  - ☐ E. Lateral periodontal cyst