

## Embryology Questions

1. Which of the following embryologic elements is responsible for the formation of dentin?
  - A. Stellate reticulum
  - B. Odontoblasts
  - C. Ameloblasts
  - D. Mesenchymal cells outside the tooth
  - E. None of the above
2. Tomes' fibers, which are 200µm long unmyelinated nerve fibers, are found in which of the following tooth associated structures, and are responsible for sensation?
  - A. Dentin
  - B. Enamel
  - C. Periodontal ligament
  - D. Cementum
  - E. All of the above

## Cystic Lesions

3. Cysts that occur at the junctions of developing structures in the head and neck are called:
  - A. Periapical cyst
  - B. Dentigerous cyst
  - C. Odontogenic keratocyst
  - D. Lateral periodontal cyst
  - E. Fissural cyst
4. All of the following are needed to accurately classify an odontogenic cyst EXCEPT:
  - A. If there is association with a tooth
  - B. Radiological appearance
  - C. Location
  - D. Entire submission for histologic examination
  - E. Patient age
5. This cyst develops from epithelial rests of Malassez after tooth development, has a non-keratinized squamous epithelial lining, and is located at the root of a non-vital tooth. The best diagnosis is:
  - A. Radicular cyst
  - B. Odontogenic keratocyst
  - C. Calcifying epithelial odontogenic cyst
  - D. Dentigerous cyst
  - E. Residual cyst
6. This lesion is characterized by thin layer of para-keratinized stratified squamous epithelium with a corrugated appearance and a prominent palisaded basal layer. The best diagnosis is:
  - A. Dentigerous cyst
  - B. Odontogenic keratocyst
  - C. Calcifying odontogenic cyst
  - D. Periapical cyst
  - E. Glandular odontogenic cyst

7. Which of the following tumors is characterized by sheets of hyperchromatic, pleomorphic cells with foci of mineralization. These islands and sheets of cells are dispersed throughout a nonspecific fibrous stroma. Foci of eosinophilic material c/w amyloid by congo red staining are also found with this tumor. The best diagnosis is:
- A. Calcifying (epithelial) odontogenic tumor
  - B. Clear cell odontogenic carcinoma
  - C. Adenomatoid odontogenic tumor
  - D. Ameloblastoma
  - E. Squamous odontogenic tumor
8. All of the following are specific patterns of an ameloblastoma EXCEPT:
- A. Follicular pattern
  - B. Plexiform cell pattern
  - C. Granular cell pattern
  - D. Acanthomatous pattern
  - E. All of the above are correct

## Unknown Cases – Website

9. This lesion arose in a 25 y/o male, and was associated with an embedded tooth. Based on the images for Case #1 on the website for this question set, the best diagnosis is:
- A. Adenomatoid odontogenic tumor
  - B. Ameloblastoma
  - C. Ameloblastic odontoma
  - D. Squamous odontogenic tumor
  - E. Calcifying Odontogenic Tumor
10. A cystic lesion is found in a 27 y/o female. Based on the images for Case #2 on the website for this question set, the best diagnosis is:
- A. Unicystic ameloblastoma
  - B. Odontogenic Keratocyst
  - C. Radicular Cyst
  - D. Calcifying odontogenic cyst
  - E. Glandular odontogenic cyst
11. A cystic lesion arises in a 32 y/o male. Based on the images for Case #3 on the website for this question set, the best diagnosis is:
- A. Unicystic ameloblastoma
  - B. Odontogenic Keratocyst
  - C. Radicular Cyst
  - D. Calcifying odontogenic cyst
  - E. Glandular odontogenic cyst
12. A 30 y/o male presents with an odontogenic lesion. Based on the findings in the images associated with Case #4 on the website for this question set, the best diagnosis is:
- A. Giant Cell Granuloma
  - B. Giant Cell Tumor
  - C. Fibrous dysplasia
  - D. Epithelioid sarcoma
  - E. Ossifying fibroma

13. A 30 y/o male presents with a cystic odontogenic lesion. Based on the findings in the images associated with Case #5 on the website for this question set, the best diagnosis is:
  - A. Odontogenic keratocyst
  - B. Unicystic ameloblastoma
  - C. Calcifying Odontogenic Cyst
  - D. Radicular cyst
  - E. Periapical cyst
  
14. A 12 year old male presented to a dental office with an asymptomatic swelling of the right posterior mandible. He was referred to an oral surgeon, and representative images of the histology are presented in Case #6 on the website associated with this question set. Based on the findings, the best diagnosis is:
  - A. Fibrous dysplasia
  - B. Desmoplastic fibroma
  - C. Juvenile ossifying fibroma
  - D. Cementifying fibroma
  - E. Odontogenic fibroma