2009 Miniboard Exam Small Animal

1. What spinal cord segment exhibits the most severe axonal loss in Degenerative Myelopathy in Pembroke Welsh Corgis?

- A. Segment T1
- B. Segment T12
- C. Segment C6
- D. Segment L1
- E. Segment L7

2. The following histologic features are consistent with Feline Gastrointestinal Eosinophilic Sclerosing Fibroplasia, EXCEPT:

- A. Intralesional bacteria
- B. Foci of dysplastic osteoblasts
- C. Eosinophilic inflammation
- D. Large reactive fibroblasts
- E. Trabeculae of dense collagen bundles

3. Which EM finding specifically supports a diagnosis of Feline Pulmonary Langerhans Cell Histiocytosis:

- A. Numerous undulations and interdigitations
- B. Numerous large phagosomes and phagolysosomes
- C. Presence of Birbeck's granules
- D. Plasma membrane pseudopods
- E. Numerous large Golgi complexes

4. Histologic findings in cats infected with highly pathogenic avian influenza (H5N1) include all of the following EXCEPT:

- A. Necrotizing hepatitis
- B. Necrohemorrhagic enteritis
- C. Bronchointerstitial pneumonia
- D. Splenic lymphoid necrosis
- E. Adrenocortical necrosis
- 5. Microscopic features of renal dysplasia in the dog include all of the following EXCEPT:
- A. Mature glomeruli
- B. Persistence of metanephric ducts
- C. Presence of primitive mesenchyme
- D. Atypical (adenomatoid) tubular epithelium
- E. Presence of cartilagenous and/or osseous tissue

6. Which of the following favors corneal scarring over normal corneal regeneration in cats and dogs:

- A. TGF-β
- B. EGF
- C. HGF
- D. KGF
- E. Normal tear film production

7. The most common location of feline reactive angioendotheliomatosis is:

- A. Liver
- B. Spleen
- C. Heart
- D. Lymph nodes
- E. Pancreas

8. In the muscle of dogs, Hepatozoon americanum forms "onion skin" cysts in which cell:

- A. Muscle cell
- B. Endomysial fibroblast
- C. Perimysial fibroblast
- D. Satellite cell
- E. Macrophage

9. Which of the following histologic lesions is/are associated with rapidly progressive and fatal Idiopathic Pulmonary Arterial Hypertension:

1. Isolated vessel medial hypertrophy

- 2. Vessel medial hypertrophy with intimal thickening
- 3. Vessel medial hypertrophy with intimal thickening and plexiform lesions
- 4. Exudative alveolitis
- A. 1
- B. 3
- C. 3 and 4
- D. 2
- E. 2 and 4

10. What cell phenotype is NOT expressed in Feline Large Granular Lymphocyte (LGL) Lymphoma:

- A. CD8β
- B. CD8αα+
- C. CD4+CD8 αα+
- D. CD3 $\epsilon$ +
- E. CD4+

11. All of the following are true regarding immunohistochemical findings for uveal spindle cell tumor of blue-eyed dogs EXCEPT:

- A. S-100 negative
- B. Desmin negative
- C. Melan-A negative
- D. Vimentin positive
- E. Smooth muscle actin negative
- 12. An antibody found to be very specific for canine plasmacytomas is:
- A. MUM/IRF4
- B. Mum-1p
- C. CD18
- D. CD68
- E. CD3

13. Melanamine and cyanuric acid crystals in the kidneys of dogs and cats are located in:

- A. Proximal convoluted tubules
- B. Distal convoluted tubules
- C. Collecting ducts
- D. Both B and C
- E. Both A and B

14. Mucopolysaccharidosis IIIA in Huntaway dogs is caused by deficient activity of:

- A. Heparin N-sulfatase
- B.  $\beta$ -mannosidase
- C.  $\beta$ -galactosidase

- D.  $\alpha$ -neuraminidase
- E. Hexosaminidase

15. Which of the following is the most aggressive gingival neoplasm in the cat:

- A. Fibromatous epulis
- B. Acanthomatous epulis
- C. Ossifying epulis
- D. Giant cell epulis
- E. Fibromatous epulis of periodontal ligament origin

16. Which of the following is NOT a common location for Hemangiosarcoma in the cat:

- A. Liver
- B. Spleen
- C. Heart
- D. Subcutaneous
- E. Cutaneous

17. Which of the following is NOT a characteristic of mammary invasive micropapillary carcinoma (IMC) in cats:

- A. Large tumor size
- B. Marked desmoplasia
- C. High histologic grade
- D. Deep muscle invasion
- E. Low survival rates

18. The most common locations of Gastrointestinal stromal tumors (GIST) in the dog are:

- A. Stomach and small intestine
- B. Small intestine and large intestine
- C. Stomach and large intestine
- D. Small intestine and cecum
- E. Large intestine and cecum

19. The major lesion associated with Vitamin A toxicity in cats is:

- A. Squamous metaplasia of the parotid salivary duct
- B. Pulmonary hypoplasia
- C. Subcutaneous edema
- D. Deforming cervical spondylosis
- E. Hepatic cysts

20. Histologically, CNS hypomyelination in the Rat Terrier with congenital goiter primarily affects:

- A. The corpus callosum
- B. The corona radiata
- C. The longitudinal fibers of the pons
- D. The pyramids
- E. The lateral funiculi of the spinal cord

21. The histologic feature of oral melanocytic neoplasms in the dog that provides the most accurate prediction of biologic behavior (i.e. – malignant behavior) is:

- A. Mitotic index
- B. Nuclear atypia
- C. Presence of deep inflammation
- D. Presence of intralesional necrosis
- E. Presence of junctional activity

22. Screening for what substance can be used to diagnose diabetic cats with acromegaly:

- A. TSH
- B. ACTH
- C. Cortisol
- D. IGF-1
- E. PTH

23. Skin fragility syndrome in the cat is associated with all of the following EXCEPT:

- A. FIP
- B. Hypoadrenocorticism
- C. Diabetes Mellitus
- D. Hepatic lipidosis
- E. Cholangiocarcinoma

24. In cats and dogs, Nesidioblastosis is:

- A. Multifocal glial nodules in the cerebral cortex
- B. Multifocal myoblast nodules in the heart
- C. Combined ductular and islet cell proliferation in the pancreas
- D. Multiple melanocytic nevi in the dermis
- E. Formation of redundant folds of mucosa in the stomach
- 25. Which of the following is NOT a component of Tetralogy of Fallot in dogs:
- A. Pulmonic stenosis
- B. Aortic stenosis
- C. Ventricular septal defect
- D. Overriding aorta
- E. Right Ventricular Hypertrophy