

**AFIP MINIBOARD EXAMINATION
MAY 2008**

DOG/CAT PATHOLOGY

1. All of the following are histologic features associated with *Tritrichomonas foetus*-induced colitis in cats EXCEPT:
 - A. Loss of goblet cells
 - B. Crypt microabscesses
 - C. Granulomatous colitis
 - D. Attenuation of the superficial mucosa
 - E. Crypt epithelial cell hypertrophy and hyperplasia

2. Symmetrical onychomadesis in Norwegian Gordon and English Setters is characterized by all of the following EXCEPT:
 - A. Lymphoplasmacytic interface dermatitis
 - B. Intraepidermal cleft formation
 - C. Basal cell vacuolization and necrosis
 - D. Lymphocytic exocytosis
 - E. Fibroplasia

3. Regarding a clonal outbreak of Acute Fatal Hemorrhagic Pneumonia in intensively housed dogs, all of the following are true EXCEPT:
 - A. All dogs had hemothorax
 - B. All dogs had an acute fibrinosuppurative pneumonia
 - C. Primarily large to medium-sized airways were affected
 - D. Occasional small vessels contained fibrin thrombi
 - E. *Streptococcus equi* subspecies *zooepidemicus* was cultured

4. Canine influenza is caused by:

- A. Influenza-A virus closely related to human influenza virus
- B. Influenza-A virus closely related to equine influenza virus
- C. Influenza-A virus closely related to porcine influenza virus
- D. Avian influenza H5N1
- E. Avian influenza H7N3

5. All are true regarding thymoma-associated exfoliative dermatitis in cats EXCEPT:

- A. Interface dermatitis
- B. Increased numbers of sebaceous glands
- C. Infundibular lymphocytic mural folliculitis
- D. Basal cell hydropic degeneration
- E. Orthokeratotic and parakeratotic hyperkeratosis

6. Regarding pigmented viral plaques in Pugs, which of the following are true:

- 1. Can be caused by canine papilloma virus-2
 - 2. Can be caused by canine papilloma virus-4
 - 3. Are non-cancerous
 - 4. Clumped keratohyaline granules were always observed
 - 5. Koilocytes or viral inclusions were never seen
- A. 1, 2
 - B. 1, 2, 3
 - C. 1, 2, 4
 - D. 2, 3, 4, 5
 - E. 2, 4, 5

7. In the dog, antibodies to type 2M myosin result in which condition?

- A. Polymyositis
- B. Masticatory myositis
- C. Extraocular myositis
- D. Myasthenia gravis
- E. Malignant hyperthermia

8. Thiamine deficiency in carnivores results in:

- A. Purkinje cell loss
- B. Nigropallidal necrosis
- C. Polioencephalomalacia
- D. Leukoencephalomalacia
- E. Bilaterally symmetrical necrosis of the caudal colliculi

9. The most common immunoglobulin produced in Feline Myeloma-Related Disorders is

- A. IgA
- B. IgD
- C. IgG
- D. IgM
- E. IgE

10. Regarding melamine and cyanuric acid toxicity in cats, all of the following are true EXCEPT:

- A. Animals are azotemic
- B. Animals are hyperphosphatemic
- C. Crystals form primarily in the proximal tubules
- D. Crystals form primarily in the distal tubules
- E. Crystals form primarily in the collecting ducts

11. Microscopic features of renal dysplasia 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

12. Regarding osteochondromas in dogs, all of the following are true EXCEPT:

- A. They arise on both flat bones and long bones
- B. They often communicate with the medullary cavity
- C. They undergo orderly endochondral ossification
- D. They can undergo malignant transformation
- E. They develop in mature animals

13. All are true about canine herpesvirus -1 infection in dogs EXCEPT:

- A. Is regularly fatal for newborn puppies
- B. Is a gammaherpesvirus
- C. Has been associated with abortion, stillbirth, and infertility
- D. Multifocal necrosis is characteristic
- E. Inapparent infection is common in adult dogs

14. In canine mammary gland tumors, maspin is a sensitive marker for:

- A. Myocytes
- B. Myoepithelium
- C. Stromal myofibroblasts
- D. Chondrocytes
- E. Fibroblasts

15. Nonepidermolytic ichthyosis in the Golden Retriever is characterized by which of the following:

- A. Laminar parakeratotic hyperkeratosis
- B. Laminar orthokeratotic hyperkeratosis
- C. Eosinophilic dermatitis
- D. Lymphocytic dermatitis
- E. Epidermal hyperplasia

16. In dogs, hepatocellular lipid vacuolation in all zones, portal fibroplasia, and biliary hyperplasia are characteristic for:
- A. Aflatoxicosis
 - B. Copper toxicosis
 - C. Toxoplasmosis
 - D. Amanita toxicosis
 - E. Thallium toxicosis
17. Morphologic criteria associated with canine adrenocortical carcinomas include all of the following EXCEPT:
- A. Necrosis
 - B. Capsular invasion
 - C. Cytoplasmic vacuolation
 - D. Trabecular growth pattern
 - E. Size larger than 2 cm diameter
18. Regarding epithelioid hemangiosarcomas in the dog all of the following are true EXCEPT:
- A. Most common in the skin and subcutaneous tissue
 - B. Neoplastic endothelial cells are plump and appear epithelioid
 - C. Neoplastic cells are immunoreactive for cytokeratin
 - D. Neoplastic cells are immunoreactive for von Willebrand factor
 - E. Neoplastic cells are immunoreactive for CD31

19. Histologic lesions seen in metaphyseal osteopathy in the dog include:

1. Suppurative inflammation of the epiphysis
2. Loss of osteoblasts
3. Persistence of calcified cartilage in the primary spongiosa
4. Suppurative inflammation of the metaphysis
5. Osteoid deposition on calcified cartilaginous spicules

- A. 1, 2, 3
- B. 2, 3, 4
- C. 2, 4
- D. 3, 4
- E. 1, 2, 3, 4, 5

20. The most significant microscopic feature of canine pyometra is:

- A. Neutrophils within the myometrium
- B. Necrosis of endometrium
- C. Vasculitis of endometrial arterioles
- D. Colonies of bacteria in luminal contents
- E. Endometrial hyperplasia and progesterational proliferation

21. Which of the following is true of erythremic myelosis in cats:

- A. Also involves the myeloid cells
- B. Associated with feline leukemia virus
- C. Associated with feline immunodeficiency virus
- D. Erythroblasts are usually 50% of the marrow cells or more
- E. C & D

22. Uveodermatologic syndrome in dogs is associated with all of the following EXCEPT:
- A. Facial dermal depigmentation
 - B. Severe bilateral uveitis
 - C. Granulomatous endophthalmitis
 - D. Encephalitis
 - E. T-lymphocyte-mediated destruction of melanin-producing cells
23. The most consistent histopathologic lesion of raisin toxicosis in dogs is:
- A. Acute tubular necrosis
 - B. Centrilobular hepatic necrosis
 - C. Necroulcerative colitis
 - D. Myocardial degeneration and fibrosis
 - E. Hepatic lipidosis
24. All of the following are true regarding virulent systemic feline calicivirus infection in cats EXCEPT:
- A. Bronchointerstitial pneumonia
 - B. Kittens generally affected
 - C. Hepatic necrosis
 - D. Splenic necrosis
 - E. Ulceration of the oral cavity

25. Regarding diabetes in cats, which of the following statements is not true?

1. It closely resembles type 2 diabetes in humans
2. Young cats are mostly affected
3. Obesity increases the risk of developing the disease
4. Females are predisposed
5. There is reduced tissue sensitivity to insulin

- A. 1
- B. 1, 2
- C. 2, 3
- D. 2, 4
- E. 2, 5