

**AFIP MINIBOARD EXAMINATION
MAY 2007**

DOG/CAT PATHOLOGY

1. _____ is a specific and sensitive marker for canine transitional epithelial (urothelial) neoplasms, and is the marker of choice for diagnostic purposes.

- A. Cytokeratin 20
- B. Cytokeratin 7
- C. Uroplakin III
- D. Urobilinogen
- E. Urothelin

2. All are features of feline intraocular sarcomas EXCEPT:

- A. Often metastasize widely
- B. Invariably destroy the lens
- C. Usually have history of trauma
- D. Significant inflammation accompanies tumor growth
- E. Some have mixed epithelial-mesenchymal phenotype

3. All of the following are true regarding Canine uveodermatologic syndrome EXCEPT:

- A. Causes destructive granulomatous endophthalmitis
- B. Most common in Akitas, Siberian huskies and Samoyeds
- C. Most dogs with uveitis also develop facial dermal pigmentation
- D. Caused by T-lymphocyte-mediated destruction of melanin-producing cells
- E. Causes interface dermatitis with macrophages containing melanin pigment

4. 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
5. All are features of prostatic hyperplasia in dogs EXCEPT:
- A. Testosterone dependent
 - B. Distribution is typically focal
 - C. Urethral stenosis is uncommon
 - D. Hyperplasia of acinar epithelium
 - E. Hyperplasia of fibromuscular stroma
6. Multiple cysts at the ovarian hilus in a dog are most likely:
- A. Fimbrial cysts
 - B. Follicular cysts
 - C. Cystic rete ovarii
 - D. Cystic corpora lutea
 - E. Cystic accessory tubes

7. Regarding masticatory myositis, all of the following are true EXCEPT:
- A. Only affects the temporalis and masseter muscles
 - B. Serum CK and AST are normal or mildly increased
 - C. Antibodies form to type 2M myosin
 - D. Microscopically there is myofiber necrosis and suppurative myositi
 - E. Myofiber regeneration is present and fibrosis is common
8. Regarding X-linked muscular dystrophy in cats, all of the following are true EXCEPT:
- A. Affected cats lack the cytoskeletal protein dystrophin
 - B. Affected cats have elevated serum CK, AST, and ALT
 - C. Grossly there is diffuse muscular atrophy
 - D. Microscopically, polyphasic myonecrosis is characteristic
 - E. Myocardial lesions include multifocal necrosis, mineralization, and fibrosis
9. All of the following may occur with humoral hypercalcemia of malignancy (HHM) EXCEPT:
- A. Renal calcification
 - B. Parathyroid gland enlargement
 - C. Rlevated total serum calcium
 - D. Thyroid C cell hyperplasia
 - E. Endocardial calcification

10. All of the following are true regarding feline large granular lymphocyte lymphoma EXCEPT:
- A. Most are CD3 positive
 - B. Most commonly arise in the ileum
 - C. Neoplastic cells are epitheliotropic
 - D. Increased peripheral blood LGL counts are common
 - E. Neoplastic cells spread to the liver, spleen, kidneys and bone marrow
11. In canine mammary gland tumors, maspin is a sensitive marker for:
- A. Myocytes
 - B. Myoepithelium
 - C. Stromal myofibroblasts
 - D. Chondrocytes
 - E. Fibroblasts
12. 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

13. Which of the following agent(s) have been associated with canine infectious tracheobronchitis?

1. *Bordatella bronchiseptica*
2. Canine adenovirus 1
3. Canine adenovirus 2
4. Canine parainfluenza virus
5. *Streptococcus canis*

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

14. In canine distemper footpad hyperkeratosis, viral inclusion bodies are primarily located in what layer(s) of the epidermis?

1. Stratum corneum
2. Stratum lucidum
3. Stratum granulosum
4. Stratum spinosum
5. Stratum basale

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

15. _____ is the most commonly reported cause of protein-losing enteropathy in the dog.
- A. Lymphosarcoma
 - B. Lymphangiectasia
 - C. *Ancylostoma caninum*
 - D. Canine parvovirus type I
 - E. *Histoplasma capsulatum*
16. Lesions of canine adenovirus type I infection include all EXCEPT:
- A. Gallbladder edema
 - B. Centrilobular hepatic necrosis
 - C. Immune complex-induced uveitis
 - D. Widespread petechiae and ecchymoses
 - E. Necrotizing bronchointerstitial pneumonia
17. Intratumoral microvessel density in canine soft-tissue sarcomas is of prognostic value for all of the following EXCEPT:
- A. Survival
 - B. Metastases
 - C. Histologic grade
 - D. Histologic features
 - E. Cellular proliferation

18. All of the following are true regarding feline progressive histiocytosis EXCEPT:

- A. Dendritic cell origin
- B. Increased cellular pleomorphism in later stages
- C. Feet, legs and face are most commonly affected
- D. Can metastasize to internal organs in the late stages
- E. Often express E-cadherin, typical of Langerhans cells

19. A common extra-uterine finding in canine pyometra is:

- A. Symmetrical alopecia
- B. Ovarian follicular cysts
- C. Bone marrow hyperplasia
- D. Tubulointerstitial nephritis
- E. Widespread extramedullary hematopoiesis

20. Regarding fibroadenomatous mammary hyperplasia in cats, all are correct EXCEPT:

- A. Ulceration is a common sequela
- B. Most common in young intact females
- C. Maybe involve a single gland or the entire chain
- D. Associated with high concentrations of estrogens
- E. May occur secondary to megestrol acetate therapy

21. All of the following regarding osteogenesis imperfecta are true EXCEPT:
- A. It is an osteopenic disease due to a defect in production of type I collagen
 - B. There is decreased synthesis of osteonectin
 - C. Growth plates are normal
 - D. Affected animals may have multiple fractures and joint laxity
 - E. Clinical manifestations are limited to the bone, teeth, eyes, and skin
22. All of the following regarding rickets in dogs are true EXCEPT:
- A. Caused by a deficiency in vitamin D
 - B. Metaphyses are “flared”
 - C. Growth plates are thickened due to failure of mineralization
 - D. There are increased numbers of chondrocytes in the zone of proliferation
 - E. There is decreased amounts of osteoid on the surfaces of trabecular bone
23. The organ consistently involved in Feline Systemic Reactive Angioendotheliomatosis is:
- A. Lung
 - B. Heart
 - C. Kidney
 - D. Brain
 - E. Skin

24. All are true about hypertrophic cardiomyopathy in the cat EXCEPT:
1. It is common in middle-aged male cats
 2. Congestive heart failure is usually present
 3. Siamese cats have an increased incidence
 4. About 50% have a concurrent “saddle thrombosis”
 5. Prominent hypertrophy of the left ventricle and interventricular septum
- A. 1
- B. 1, 2
- C. 3
- D. 3, 4
- E. 3, 4, 5

25. A lesion associated with nodular dermatofibrosis in German Shepherds is:
- A. Multiple renal cystadenocarcinomas
 - B. Bilateral thyroid nodular hyperplasia
 - C. Congenital biliary cysts
 - D. Bilaterally symmetrical thigh alopecia
 - E. Subaortic stenosis