

**AFIP MINIBOARD EXAMINATION
MAY 2007**

LAB ANIMAL PATHOLOGY

1. Which of the following is(are) a feature(s) of Simian retrovirus type D infection in macaques?
 - A. The most significant viral agent of acquired immunodeficiency
 - B. Seronegativity in viral-infected macaques is common
 - C. Virus is tropic for B and T lymphocytes, macrophages, and epithelial cells
 - D. Uniquely associated diseases include noma and retroperitoneal fibromatosis
 - E. All of the above

2. _____ is the primary cause of bacterial meningitis in nonhuman primates.
 - A. *Streptococcus pneumoniae*
 - B. *Klebsiella pneumoniae*
 - C. *Pasteurella multocida*
 - D. *Neisseria meningitidis*
 - E. *Streptococcus pyogenes*

3. Common sites of cysts in hamsters include all of the following EXCEPT:
 - A. Liver
 - B. Kidney
 - C. Pancreas
 - D. Epididymis
 - E. Seminal vesicles

4. Common lesions of Hamster Parvovirus include all of the following EXCEPT:
- A. Domed calvaria
 - B. Testicular atrophy
 - C. Cerebellar hypoplasia
 - D. Enamel hypoplasia of the incisor teeth
 - E. Incisor enamel hypoplasia
5. Gross and microscopic lesions in the adult form of rat virus disease include all of the following EXCEPT:
- A. Scrotal hemorrhage and peritesticular fibrinous exudation
 - B. Hemorrhage and malacia in the cerebrum and cerebellum
 - C. Cerebellar hypoplasia
 - D. Intranuclear inclusions in hepatocytes, endothelial cells and biliary epithelium
 - E. Abortion and fetal resorption
6. Gross and microscopic lesions of sialodacryoadenitis in the rat include all of the following EXCEPT:
- A. Necrosis of ductal and acinar epithelial cells of the parotid and submandibular salivary and lacrimal glands
 - B. Nonkeratinizing squamous metaplasia of ductal and acinar structures of salivary and lacrimal glands
 - C. Corneal ulceration
 - D. Necrotizing rhinitis of both the respiratory and olfactory epithelium
 - E. Transient tracheitis with bronchitis, bronchiolitis, and loss of respiratory epithelial cells

7. In the guinea pig, all of the following are true concerning rhabdomyomatosis, EXCEPT:
- A. The vacuoles contain glycogen
 - B. Most frequently seen in left ventricle
 - C. May be observed in guinea pigs of various ages
 - D. Can be associated with compromised cardiac function
 - E. Vacuolated myofibers may have “spider cell” appearance
8. All of the following are consistent with adenoviral pneumonitis in guinea pigs EXCEPT:
- A. Consolidation of the cranial lung lobes
 - B. Scattered necrotic foci
 - C. Lymphoplasmacytic bronchiolitis
 - D. Epithelial intranuclear inclusion bodies
 - E. Low morbidity rate but mortality rate up to 100%
9. All of the following are lesions associated with Tyzzer's Disease in gerbils EXCEPT:
- A. Necrotizing hepatitis
 - B. Suppurative encephalitis
 - C. Necrosis of enterocytes in the ileum and cecum
 - D. Necrotizing myocarditis
 - E. Suppurative pneumonia

10. The laboratory animal that is a useful sentinel animal for Tyzzer's Disease is:
- A. Rat
 - B. Gerbil
 - C. Hamster
 - D. Mouse
 - E. Rabbit
11. Concerning SCID in mice, all of the following statements are true, EXCEPT:
- A. Inherited as an autosomal recessive trait
 - B. Affected mice are susceptible to fungal infections
 - C. DNA-PK enzyme activity is normal
 - D. Affected mice are highly susceptible to ionizing radiation
 - E. The life span of affected mice is decreased
12. All are true about thymoma in the hamster EXCEPT:
- A. a viral pathogenesis is likely
 - B. it largely resembles thymoma in humans
 - C. most have been classified as B1 thymomas
 - D. it is located in the anterior mediastinum
 - E. areas of medullary and cortical differentiation are present in the tumors

13. All of the following are true regarding eosinophilic crystalline pneumonia in mice EXCEPT:
- A. More common in males
 - B. Composed of Ym1 protein
 - C. Common in C57BL/6 mice
 - D. Common in 129S4/SvJae mice
 - E. Increased incidence in older mice
14. All of the following are true about Hamster Polyomavirus EXCEPT:
- A. Caused hair follicle epitheliomas
 - B. Lymphomas do not contain infectious virus
 - C. Causes epizootics of lymphoma in young hamsters
 - D. Lymphomas primarily arise in the spleen, and axillary and cervical lymph nodes
 - E. Adult hamsters are susceptible to the oncogenic effects of Hamster polyomavirus
15. All of the following are true regarding atrial thrombosis in hamsters EXCEPT:
- A. Involves right auricle and atrium
 - B. Often associated with amyloidosis
 - C. Results in a consumptive coagulopathy
 - D. Females are affected earlier than males
 - E. Causes bilateral ventricular hypertrophy

16. In the rat, intestinal villous attenuation, necrosis of enterocytes with epithelial syncytia are pathognomic for which virus:
- A. Sendai virus
 - B. Rotavirus
 - C. Parker's rat coronavirus
 - D. Kilham's rat virus
 - E. Hantavirus
17. In the rat, *Mycoplasma pulmonis* has an affinity for epithelial cells of which of the following:
- 1. Respiratory tract
 - 2. Middle ear
 - 3. Endometrium
- A. 1 and 2
 - B. 1 and 3
 - C. 2 and 3
 - D. All of the above
 - E. None of the above
18. Regarding myofasciitis in the domestic ferret, all of the following are true EXCEPT:
- A. It is a disease of young ferrets
 - B. There is atrophy of skeletal muscle, esophageal dilatation, and splenomegaly
 - C. Myeloid hyperplasia of the spleen and bone marrow is a prominent feature
 - D. There is eosinophilic inflammation of the skeletal muscle and fascia
 - E. Striated muscle of the esophagus, heart, limbs, and head can be involved

19. The most likely cause of chronic, suppurative cervical lymphadenitis in guinea pigs is:
- A. *Streptococcus zooepidemicus*
 - B. *Streptobacillus moniliformis*
 - C. *Klebsiella pneumoniae*
 - D. *Streptococcus pneumoniae*
 - E. *Pasteurella multocida*
20. All of the following are lesions associated with hyperadrenocorticism in breeding gerbils EXCEPT:
- A. Fatty liver
 - B. Thymic involution
 - C. Atrophy of pancreatic islets
 - D. Adrenal lipid depletion
 - E. Adrenal hemorrhage
21. In the ferret, proliferative colitis is a feature of infection with:
- A. Coronavirus
 - B. *Helicobacter mustelae*
 - C. *Lawsonia intracellulare*
 - D. *Clostridium piliformis*
 - E. Canine morbillivirus

22. The most likely route of transmission of *Pasteurella multocida* in rabbits is:
- A. Direct nasal contact with a shedder animal
 - B. Venereal spread
 - C. Aerosol spread
 - D. Contact with fomites
 - E. Orphan kits nursing an infected doe
23. An immunohistochemical stain identified as a marker of anaplasia in ferret adrenocortical tumors is:
- A. GFAP
 - B. MAP-2
 - C. GATA-4
 - D. desmin
 - E. NFP
24. Regarding chronic progressive glomerulonephropathy in rats, all of the following are considered predisposing factors EXCEPT:
- A. Age, animals over 12 months of age
 - B. High protein diets
 - C. Prolactin levels
 - D. Sex, disease is more common and more severe in males
 - E. Mesangial deposition of IgG

25. In rats, polyarteritis nodosa may affect medium-sized arteries in all of the following EXCEPT:
- A. Lung
 - B. Pancreas
 - C. Testis
 - D. Kidney
 - E. Mesentary