2009 Miniboard Exam
Lab Animal

1. A finding associated with myoepitheliomas in mice is:
A. Hyaline droplets in renal tubular epithelium
B. Hepatic eosinophilic cell foci
C. Myeloid hyperplasia
D. Splenic fibrosis
E. Amyloidosis

2. Characteristics of Nipah viral infection in Guinea pigs include all of the following, EXCEPT:
A. Arterial vasculitis
B. Venous vasculitis
C. Syncytial cells formation
D. Intracytoplasmic inclusion bodies
E. Sparing of the genitourinary tract

3. A consistent histologic finding in dehydrated mice is:
A. Myeloid hypoplasia
B. Erythroid hypoplasia
C. Thymic apoptosis
D. Pulmonary congestion
E. Lymphoid hyperplasia

4. In Murine Mucolipidosis Types II and IIIc, which cell did NOT develop cytoplasmic vacuolar inclusions in *Gnptab*$^{-/-}$ and *Gnptg*$^{-/-}$ mice:
A. Fibrocytes
B. Pancreatic exocrine cells
C. Gastric glandular epithelium
D. Salivary gland glandular epithelium
E. Bulbourethral glandular epithelium

5. Which of the following is NOT an important feature of Nutritional Muscular Dystrophy in Guinea Pigs:
A. Coagulative necrosis of myofibers
B. Hyalinization of myofibers
C. Increased basophilia of myofibers
D. Regenerating myofibers
E. Mineralization of myofibers

6. The mouse strain resistant to disease produced by ectromelia virus is:
A. DBA
B. C3H
C. BALB/c
D. B6
E. A

7. Recent outbreaks of a fatal herpesvirus infection in domestic rabbits are characterized by all of the following EXCEPT:
A. Necrohemorrhagic dermatitis
B. Pulmonary hemorrhage
C. Splenic necrosis
D. Necrohemorrhagic myocarditis
E. Peripheral necrotizing lymphadenitis

8. The most prominent lesion in cotton-top tamarins infected with *Encephalitozoon cuniculi* is:
A. Meningoencephalitis
B. Prostatitis
C. Cystitis

D. Interstitial nephritis
E. Retinitis

9. What is the most common clostridial pathogen associated with the enteritis complex in juvenile rabbits:
A. *Clostridium piliforme*
B. *Clostridium perfringens Type E*
C. *Clostridium perfringens Type C*
D. *Clostridium spiroforme*
E. *Clostridium difficile*

10. Prolactin producing pituitary adenomas in the New Zealand White rabbit are often associated with:
A. Mammary gland adenocarcinomas
B. Mammary gland dysplasia
C. Multiple ovarian cysts
D. Renal mineralization
E. Exfoliative dermatitis

11. The cause of transmissible murine colonic hyperplasia is:
A. Helicobacter rodentium
B. Salmonella enteritidis
C. Rodentolepsis nana
D. Citrobacter rodentium
E. Lawsonia intracellularis

12. Which of the following tumors is NOT common in Dungarian hamsters:
A. Papilloma
B. Squamous cell carcinoma
C. Atypical fibroma
D. Lymphoma
E. Mammary gland adenoma

13. Which of the following is closely associated with noma in rhesus monkeys:
A. Simian immunodeficiency virus
B. Simian Type D retrovirus
C. Simian T-lymphotropic virus
D. Cercopithecine herpesvirus 1
E. Simian lentivirus

14. The most common hormone secreted from cynomolgus macaque pituitary adenomas is:
A. Growth hormone
B. Thyroid-stimulating hormone
C. Luteinizing hormone
D. Prolactin
E. Follicle-stimulating hormone

15. Which of the following is NOT a characteristic of uterine infarctions in cynomolgus monkeys:
A. Areas of infarction restricted to outer myometrium
B. Minimal to no inflammatory response
C. Vessels at margin of lesions contain fibrin thrombi
D. Bilateral symmetrical uterine lesions
E. Histologic evidence of previous pregnancy

16. The most likely cause of granulomatous serositis in IFN-γ -/- mice is:
A. Mouse Hepatitis Virus (Coronavirus)
B. LDV (Lactate Dehydrogenase Elevating Virus)
C. Ectromelia virus
D. Mouse Parvovirus-1
E. Murine Polyomavirus

17. The most likely cause of diffuse hyperkeratotic dermatitis in athymic nude mice is:
A. *Corynebacterium kutscheri*
B. *Corynebacterium bovis*
C. *Staphylococcus aureus*
D. *Staphylococcus xylosus*
E. *Streptobacillus moniliformis*

18. All of the following are true regarding large granular lymphocytic (LGL) leukemia in rats EXCEPT:
A. Arises within the spleen
B. Is not retrovirus associated
C. Occurs primarily in young rats
D. Occurs most commonly in F344 rats
E. Concurrent hemolytic anemia and thrombocytopenia is common

19. All of the following are true regarding polyarteritis in rats EXCEPT:
A. Lungs are commonly affected
B. Testes are commonly affected
C. Sprague Dawley rats are predisposed
D. Medium-sized arteries are most affected
E. Spontaneous hypertensive rat strains are predisposed

20. The pathognomonic microscopic change in rotavirus in infant rats is:
A. Epithelial syncytia
B. Enterocyte necrosis
C. Villus blunting and fusion
D. Eosinophilic cytoplasmic inclusions
E. Eosinophilic intranulclear inclusions

21. Which of the following is NOT a characteristic of hereditary hydrocephalus in laboratory-reared Golden Hamsters:
A. Affects only lateral ventricles
B. Rarefaction of underlying periventricular and subependymal parenchyma
C. Attenuation of ependymal epithelium
D. No obvious motor deficits or abnormal behavior
E. Marked gliosis of periventricular and subependymal parenchyma

22. By EM, the eosinophilic substance ("not amyloid") of the mouse nasal septum is connected to material within which organelle:
A. Golgi apparatus
B. Mitochondria
C. Rough endoplasmic reticulum
D. Smooth endoplasmic reticulum
E. Lysosomes

23. All of the following are lesions of Rat parvovirus EXCEPT:
A. Necrotizing enteritis
B. Cerebral hemorrhage
C. Cerebellar hypoplasia
D. Testicular hemorrhage
E. Amphophilic intranuclear inclusions within hepatocytes

24. Tyzzer's disease in Cotton-top tamarins causes which of the following lesions:
A. Necrotizing typhlocolitis
B. Hepatitis
C. Myocarditis
D. A and B
E. All of the above

25. Megaloileitis in rats can be caused by:
A. Salmonella
B. Rat parvovirus
C. Helicobacter bilis
D. Clostridium piliforme
E. Citrobacter rodentium