

Miniboard Exam 2011 Veterinary Pathology - Large animal

1. The most important site of primary viral replication for Foot-and-Mouth Disease Virus is:
  - A. Oropharynx
  - B. Lungs
  - C. Trachea
  - D. Tongue
  - E. Nasopharynx
  
2. The best sites for detection of Rabies virus in cattle using immunohistochemistry is:
  - A. Cerebrum and hippocampus
  - B. Cerebrum and cerebellum
  - C. Brainstem and cerebellum
  - D. Cerebellum and hippocampus
  - E. Cerebellum and spinal cord
  
3. Which immunohistochemical marker is the most relevant for a diagnosis of Purkinjeoma in the pig?
  - A. Vimentin
  - B. Protein gene product 9.5
  - C. Desmin
  - D. Neuron specific enolase
  - E. Atrial natriuretic peptide
  
4. Which virulence factor of *Mannheimia hemolytica* is responsible for oxidative burst of leukocytes, the formation of transmembrane pores with subsequent oncotic necrosis, and stimulation of macrophages to release cytokines?
  - A. LPS
  - B. Adhesins
  - C. Capsule
  - D. Outer membrane proteins
  - E. LKT
  
5. The target tissue of *Brachyspira mudochii* infection in pigs is:
  - A. Duodenum
  - B. Jejunum
  - C. Ileum
  - D. Cecum
  - E. Colon
  
6. Which statement concerning the binding of Jaagsiekte sheep retrovirus (JSRV) is correct:
  - A. The SU subunit of the Env glycoprotein binds to host cell hyaluronidase 2 (Hyal2)
  - B. The TM subunit of the Env glycoprotein binds to host cell hyaluronidase 2 (Hyal2)
  - C. The MA subunit of the GAG protein binds to host cell hyaluronidase 2 (Hyal2)
  - D. The SU subunit of the Env glycoprotein binds to host cell TLR 2
  - E. The TM subunit of the Env glycoprotein binds to host cell TLR 2
  
7. Which of the following is true concerning arterial calcification in race horses?
  - A. Pathology was noted primarily in the tunica intima of the carotid arteries
  - B. Pathology was noted in the tunica media of femoral arteries

- C. Pathology was noted in the tunica intima of pulmonary arteries
- D. Pathology was noted in the tunica intima of femoral arteries
- E. Pathology was noted primarily in the tunica media of pulmonary arteries

8. Which of the following is true concerning ovine scrapie?

- A. Animals with variant allele ARQ are most resistant
- B. Animals with variant allele AHQ are most resistant
- C. Animals with variant allele ARH are most resistant
- D. Animals with variant allele VRQ are most susceptible
- E. Animals with variant allele ARR are most susceptible

9. In which tissue is Bovine Viral Diarrhea antigen most commonly identified by immunohistochemistry in neonatal goats?

- A. Liver
- B. Placenta
- C. Spleen
- D. Thyroid gland
- E. Lung

10. In the horse, massive pulmonary edema and endothelial syncytia are features of the disease caused by:

- A. African horse sickness virus
- B. Hendra virus
- C. Nipah virus
- D. Equine adenovirus
- E. Equine arteritis virus

11. Which of the following is NOT a characteristic of Rinderpest infection in the Bovid:

- A. Bronchointerstitial pneumonia with alveolar syncytial cells
- B. Caused by a morbillivirus
- C. Lymphoid necrosis
- D. Gastrointestinal tract ulcers
- E. Oral cavity epithelial syncytial cells with intracytoplasmic and intranuclear inclusion bodies

12. Regarding vascular urinary bladder tumors from cows with enzootic hematuria, which of the following is true:

- A. p53 immunoreactivity was seen in high percentages in hemangiomas, hemangioendotheliomas and hemangiosarcomas
- B. Cyclin D1 overexpression is seen with the highest frequency in hemangiosarcomas
- C. Cyclin D1 overexpression is seen with the highest frequency in hemangioendotheliomas
- D. All of the above are false
- E. A and B

13. In cattle with epithelioid cells in mediastinal lymph nodes without cancer, all of the following are true EXCEPT:

- A. There was marked disruption of lymph node architecture
- B. Epithelioid cells lacked atypia
- C. Epithelioid cells lacked mitotic figures
- D. Epithelioid cells are thought to be of mesothelial origin
- E. Epithelioid cells sometimes formed tubular structures

14. All of the following are true regarding *Trypanosoma evansi* infection in horses EXCEPT:

- A. The area of the brain most severely affected was the parietal lobe
- B. Lesions were detected in the trigeminal ganglia consisting of vacuolation within the ganglia
- C. Gross lesions included splenomegaly
- D. Gross lesions included lymphadenomegaly

E. Gross white matter lesions were found in cerebrum and were unilateral, yellow, gelatinous, and friable

15. Which of the following areas were grossly affected in domestic sheep with usnic acid poisoning secondary to eating the lichen *Xanthoparmelia chlorochroa*:

- A. Axial skeletal muscle
- B. Tongue
- C. Diaphragm
- D. Appendicular muscles
- E. Cerebrum

16. All of the following are common laboratory findings in equine associated with rattlesnake envenomation EXCEPT:

- A. Thrombocytopenia
- B. Hypoproteinemia
- C. Hyperlactatemia
- D. Hypolactatemia
- E. High RBSS

17. In swine infected with Porcine Circovirus 2 intracytoplasmic amphophilic botryoid inclusion bodies were observed in all of the following EXCEPT:

- A. Bronchial glandular epithelium
- B. Bronchial epithelium
- C. Renal tubular epithelium
- D. Lymph nodes
- E. Gall bladder epithelium

18. In calves experimentally infected with *Clostridium perfringens* type D toxin the most striking histological change consisted of

- A. Multifocal, bilateral, encephalomalacia of the corpus striatum
- B. Multifocal, bilateral, thalamic necrosis
- C. Cerebellar peduncle necrosis
- D. Perivascular high protein edema in the brain and lung
- E. Multifocal serosal hemorrhage throughout the gastrointestinal tract

19. In female miniature pigs with uterine lesions, between 50 to 70% of the nuclei were immunoreactive for the estrogen and progesterone receptor EXCEPT:

- A. Cystic endometrial hyperplasia
- B. Adenomyosis
- C. Adenomas
- D. Smooth muscle tumors
- E. Adenocarcinomas

20. Which of the following is the cause of White Liver Disease?

- A. Cobalt deficiency
- B. Vitamin E imbalance
- C. Selenium deficiency
- D. Vitamin A toxicosis
- E. Vitamin B12 toxicosis

21. Which of the following protein is defective in congenital pseudomyotonia in Chianina cattle?

- A. SERCA1
- B. Ryanadine receptor 1 (RYR1)
- C. Dystrophin
- D. Reelin
- E. Procollagen IV proteinase

22. Where is amyloid deposition most prominent in sheep?
- A. Duodenum
  - B. Colon
  - C. Tongue
  - D. Jejunum
  - E. Liver
23. In sheep with pulmonary adenomatosis, surfactant A (SP-A) was expressed in all of the following except:
- A. Tumor nodules
  - B. Alveoli
  - C. Alveolar macrophages
  - D. Ciliated epithelium of terminal bronchioles
  - E. Clara cells
24. In pigs experimentally infected by porcine teschovirus, where does antigen appear first?
- A. Spinal ganglion
  - B. Brainstem
  - C. Cerebellum
  - D. Ventral horn of spinal cord
  - E. Cerebrum
25. The most severe form of leptospirosis in pigs typically contains which component of inflammation?
- A. Lymphocytes
  - B. Plasma cells
  - C. Histiocytes
  - D. Neutrophils
  - E. Eosinophils