AFIP MINIBOARD EXAMINATION
MAY 2007

LARGE ANIMAL PATHOLOGY

1. Hepatocytic megalocytosis, hepatic fibrosis, biliary proliferation, and nodular regeneration are features of:

A. Chronic hypoxia

B. Sporidesmin toxicity

C. Microcystin LR toxicity

D. Pyrrolizidine alkaloid toxicity

E. East Coast Fever (*Theileria parva*)

2. Which of the following systems are principally affected by *Adonis* sp. toxicosis in the horse?

1. Lymphatic
2. Cardiovascular
3. Integumentary
4. Musculoskeletal
5. Gastrointestinal

A. 1

B. 1, 2

C. 2, 3, 4

D. 2, 4, 5

E. 2, 5

3. All of the following are true regarding papillomatous digital dermatitis in cattle EXCEPT:

   A. Contagious

   B. Caused by spirochetes

   C. Caused by *Treponema* sp.

   D. Also known as hairy heel warts

   E. Caused by *Bacteroides melaninogenicus*

4. Transplacental infection of pig fetuses with porcine reproductive and respiratory virus causes:

   A. Arthrogryposis

   B. Hydranencephaly

   C. Umbilical cord hemorrhage

   D. Hepatic necrosis with intranuclear inclusions

   E. Death of fetuses at different stages of gestation

5. Findings in bovine freemartins include all EXCEPT:

   A. Seminal vesicles

   B. Ovarian Sertoli cells

   C. Hyperplasia of the vulva

   D. Hyperplasia of the clitoris

   E. Lack of communication between paramesonephric structures and vagina

6. Causes of endometrial hyperplasia include all EXCEPT:

   A. Zearalenone in sows

   B. Cystic follicles in cows

   C. Hypopituitarism in mares

   D. Granulosa cell tumors in cows

   E. *Trifolium subterraneum* in ewes

7. All of the following are common age-related changes in the brains of horses EXCEPT:

   A. Spheroids

   B. Calcium deposits

   C. Neuropil vacuolation

   D. Perivascular hemosiderin

   E. A&C

8. Regarding Malignant Edema in horses, all of the following are true EXCEPT:

   A. Caused most commonly by *Clostridium septicum*

   B. Virtually always secondary to a penetrating wound

   C. Affected muscles and fascia are swollen, hemorrhagic and edematous

   D. Vasculitis is characteristic of the disease

   E. There is suppurative inflammation and necrosis of affected muscles

9. The histologic renal lesion caused by *Actinobacillus equuli* infection in foals is:

A. Acute neutrophilic tubulitis

B. Tubulointerstitial nephritis

C. Suppurative glomerulitis

D. Acute tubular necrosis

E. Necrotizing vasculitis

10. Cattle can develop acute tubular necrosis following ingestion of all of the following EXCEPT:

A. *Quercus* sp.

B. Ochratoxin A

C. *Amaranthus retroflexus*

D. *Halogeton*

E. *Rumex*

11. Colonic agangliosis (lethal white foal syndrome) in horses results from mutations in which receptor:

A. Endothelin-B

B. Platelet-derived growth factor (PDGF)

C. Glial-derived neurotrophic factor (GDNF)

D. Epidermal growth factor (EGF)

E. Endothelin-3

12. Congestion of gray matter throughout the brain in cattle is a striking feature of infection with:

A. *Babesia bovis*

B. *Trypansoma cruzi*

C. *Mycoplasma wenyonii*

D. *Anaplasma marginale*

E. *Histophilus somni*

13. The most sensitive and specific diagnostic indicator for equine polysaccharide storage myopathy is:

A. Myocyte atrophy

B. Amylase-sensitive glycogen

C. Subsarcolemmal vacuolation

D. PAS-positive intracytoplasmic inclusions

E. Amylase-resistant abnormal polysaccharide

14. The key microscopic lesion of atrophic rhinitis in pigs is:

A. Hyperplastic nasal epithelium

B. Osteopenia of the conchae

C. Lymphoplasmacytic infiltrates in the lamina propria

D. Mucopurulent exudate on the surface of the conchae

E. Metaplasia of the nasal epithelium

15. In calves, fibrinous cholecystitis is pathognomonic for:

A. Leptospirosis

B. Tyzzer's disease

C. *Clostridium septicum*

D. Acute enteric salmonellosis

E. *Clostridium perfringens* type A

16. In horses, gastrointestinal epithelial sloughing, hemorrhagic ulcers of the urinary bladder, and myocardial necrosis are lesions of:

A. NSAID toxicity

B. Cantharadin toxicity

C. Potomac horse fever

D. Monensin toxocosis

E. *Rhodococcus equi* infection

17. Common causes of scrotal dermatitis in the bull include:

A. *Treponema* sp.

B. *Besnoitia besnoiti*

C. *Trichophyton verrucosum*

D. *Dermatophilus congolensis*

E. B&D

18. Equine keratomycosis is most commonly caused by:

A. *Mucor* spp.

B. *Aspergillus* spp.

C. *Histoplasma capsulatum*

D. *Blastomyces dermatitidis*

E. B&D

19. Amnionitis without placentitis in cows is most indicative of infection with:

A. *Escherichia coli*

B. *Ureaplasma diversum*

C. *Chlamydophila abortus*

D. *Listeria monocytogenes*

E. *Campylobacter fetus* ssp. fetus

20. A goat with testes, an XY chromosomal make-up, a vulva and no penis is termed a:

A. Chimera

B. True hermaphrodite

C. Lateral hermaphrodite

D. Male pseudohermaphrodite

E. Female pseudohermaphrodite

21. All of the following regarding nutritional secondary hyperparathyroidism in the horse are true EXCEPT:

A. Often caused by low-calcium, high phosphorus diets

B. Gross lesions include bilateral thickening of the maxilla

C. Primary lesions occur at the growth plate

D. Microscopically there is bone resorption and replacement with fibrous tissue

E. Bone resorption is stimulated by increased production of PTH

22. All of the following lesions are associated with *Erysipelothrix rhuseiopathiae* infection pigs EXCEPT:

A. Vegatative valvular endocarditis

B. Suppurative synovitis

C. Discospondylitis

D. Cutaneous infarcts

E. Embolic nephritis

23. Neoplasia in cattle associated with ingestion of bracken fern include:

1. Transitional cell carcinoma
2. Squamous cell carcinoma
3. Papilloma
4. Hemangiosarcoma
5. Fibrosarcoma

A. 1

B. 1, 2

C. 1, 2, 3

D. 1, 2, 3, 4

E. 1, 2, 3, 4, 5

24. Inherited hemochromatosis of Salers cattle affects primarily:

1. Bones
2. Liver
3. Heart
4. Kidneys
5. Skin

A. 1

B. 1, 2

C. 1, 2, 3

D. 1, 2, 3, 4

E. 1, 2, 3, 4, 5

25. Disease due to infection with which of the following agent(s) is more severe when combined with a dual porcine circovirus 2 infection?

1. *Mycoplasma hyopneumoniae*
2. Porcine reproductive and respiratory syndrome virus
3. Porcine parvovirus
4. *Pasteurella multocida*
5. *Trichuris suis*

A. 1

B. 1, 2

C. 1, 2, 3

D. 1, 2, 3, 4

E. 1, 2, 3, 4, 5