

Mock Exam - May 2013 - Fabio Del Piero – Louisiana State University

1. Alligator

MD: Nephritis, caseous, multifocal, chronic

Cause: Gram negative bacteria in this case

DD: *Mycobacterium* spp.; renal gout (lesion not gritty in this case)

2. Alligator

MD: Thyroid gland. Goiter

Pathogenesis: iodine responsive disease

3. Chicken

Skin

Name the condition: pediculosis

Cause: *Menacanthus stramineus*

4. Young broiler

Liver

MD: Lymphosarcoma – T cell

Name of the disease: Marek Disease

Agent: Gallid herpesvirus 2

Name another similar disease in older animals: Lymphoid leukosis

Name the agents in older animals: leukosis/sarcoma group of avian retroviruses.

These viruses are commonly called avian leukosis viruses and belong to subgroups A, B, C, D, E, and J. Subgroups A and B have been most prevalent in western countries, until the emergence of subgroup J.

Other Marek's disease lesions: neuritis and infiltration of other organs, especially proventriculus, spleen and iris.

5. Chicken

Coxofemoral joint

Condition: articular gout

Pathogenesis: Hyperuricemia

6. Chicken

Caseous (fibrinous and heterophilic) laryngitis

Disease: Infectious coryza

Cause: *Avibacterium (Haemophilus) paragallinarum*

7. Chicken

Name the condition: Renal gout

Pathogenesis: Hyperuricemia

8. Egret

Condition: oral trematodiasis

Cause: *Clinostomum marginatum*

Intermediate host: fish (e.g. *Gambusia affinis holbrooki* – mosquito fish)

9. Parakeet

Kidney, gonads.

MD: Osteosarcoma

DD: Sarcoma, lymphosarcoma, nephroblastoma, carcinoma

10. Cow

MD: Jejunal hemorrhage, peracute, segmental, severe

Condition: Jejunal Hemorrhagic Syndrome

No cause known.

11. Calf

MD: Liver rupture and exsanguination

Cause: Trauma (cow stepped on in this case).

12. Bovine

MD: Amniotic epithelial plaques

13. Cow

MD: Corneal and scleral papilloma with squamous cell carcinoma

Causes: Papillomavirus and/or actinic radiation

14. Cow

MD: Granulomatous hepatitis

Cause: *Mycobacterium bovis*

15. Horse

Dorsal and caudal acute severe lung hemorrhage

Condition: Exercise Induced Pulmonary Hemorrhage (EIPH)

Pathogenesis: Increased cardiac output and consequent increased pulmonary capillary pressure with alveolar capillary rhexis

16. Dog

MD1: Hemorrhagic enteritis

Causes: CPV-2, Clostridium perfringens, Ancylostoma caninum.

MD2: Intraluminal intestinal hemorrhage

Causes: Immunomediated thrombocytopenia, Vit K inhibitors (rodenticides)

17. Dog

MD: Chylothorax

Pathogenesis: Rupture thoracic duct

18. Dog

Liver

DD1: Hydropic degeneration

DD2: Necrosis, bridging

This is the chylothorax case (hydropic degeneration)

19. Dog

MD: Ethmoidal meningioma

20. Dog

Brain

MD: Oligodendroglioma

21. Dog

Heart

DD1: Neuroendocrine chemodectoma

DD2: Hemangiosarcoma

DD3: Myxofibrosarcoma

DD4: Rhabdomyosarcoma

DD5: Lymphosarcoma

DD6: Thyroid ectopic adenocarcinoma

22. Dog

Condition: *Dirofilariasis*

Cause: *Dirofilaria immitis*

23. Dog

MD: Right atrial hemangiosarcoma with pulmonary metastases

24. Dog

MD: Follicular cystitis

25. Dog

MD: Liver cirrhosis (postnecrotic macronodular regeneration with fibrosis)

DD: Presumptive survivors of sago palm (*Cycas* spp.), *Lantana camara*,
acetaminophen, barbiturate

26. Dog

Sphenoid bone

MD: Osteosarcoma or multilobular tumor of bone

27. Dog

Spleen

Differential diagnoses:

DD1: lymphoid hyperplasia

DD2: Lymphosarcoma

DD3: Spindle cell sarcoma

DD4: histiocytic sarcoma

DD5: Myelolipoma

DD6: Hemangiosarcoma

DD7: undifferentiated sarcoma

28. Dog

MD1: Renal lymphosarcoma

MD2: Mesenteric lymph node lymphosarcoma

MD3: Intestinal lymphosarcoma

(This was a T cell lymphosarcoma)

29. Dog

Tarsus

DD1. Osteosarcoma

DD2. Synovial sarcoma

30. Dog

MD 1: Renal fibrosis with tubular cystic dilatation, global (end stage kidney)

MD2: Necrohemorrhagic ulcerative gastritis

MD3: Apical bilateral necrosis of tongue

Condition: Uremia

31. Dog

Hepatic necrosis

Causes: Sago palm (*Cycas* spp.), *Lantana camara*, acetaminophen, barbiturate.

32. Dog

MD: Hydrocephalus

33. Goat

MD: Cranioventral bronchopneumonia

Cause: *Pasteurella multocida*

34. Horse

MD1: Acquired fold

MD2: Extrusion of red pulp

MD3: Hyperemia (barbiturate injection)

35. Horse

Colon

MD: Necrotizing colitis

Cause: *Salmonella enterica*

36. Equine

MD1: Edema and hemorrhage secondary to cord torsion

MD2: Funicular plaques

Predisposing factor: excessive length of the umbilical cord

37. Horse

Small intestine

MD: Lymphosarcoma with necrosis

38. Foal

MD: Jejunal volvulus with segmental hemorrhagic necrosis

Pathogenesis: compression of venous return, congestion, ischemia, necrosis

39. Horse

MD: Horseshoe kidneys

40. Horse

Bone

Condition: Osteochondrosis dissecans

Pathogenesis: Focal ischemic necrosis of growth cartilage initiated by necrosis of cartilage canal blood *vessels*. Because the necrotic cartilage does not undergo mineralization or vascular penetration, focal failure of enchondral ossification occurs when the ossification front approaches the lesion

41. Horse

MD: First phalanx comminuted articular fracture

42. Cat

MD: Serous atrophy of fat

Condition: Emaciation

Causes: Chronic infection, parasitism, malnutrition and starvation, stomatitis and dental anomalies.

43. Ferret

MD: Adrenal gland cortical adenocarcinoma with necrosis

44. Rat

MD: Mammary fibroadenoma

45. Guinea pig

MD1: Cranioventral (neutrophilic) bronchopneumonia

MD2: Hepatic necrosis, multifocal to coalescing

46. Bearded dragon

MD1: Egg-bound

MD2: Fibrinous coelomitis

47. Chameleon

MD: Distal intestine intussusception with segmental (ischemic) hemorrhagic necrosis

48. Cat

MD: Hepatic lipidosis

Condition: Feline fatty liver syndrome

Triggering factor: anorexia

49. Pig

MD: Cutaneous infarcts

Condition: Erysipelas

Cause: *Erysipelothrix rhusiopathiae*

50. Guinea pig

MD: Cystic ovaries, bilateral

51. Ovine fetus

Condition: Fetal diarrhea

Pathogenesis: Stress due to hypoxia

In which species is this commonly seen?: Small ruminants > Cattle > Horse

52. Sheep

MD: Colonic granulomatous serositis, multifocal with mineralization

Condition: Oesophagostomiasis

Cause: *Oesophagostomum colombianum*

53. Piglet

MD: Fibrinous enteritis with intraluminal diphtheritic cast

Cause: *Salmonella enterica*

54. Horse

Skin

MD/Condition: Hirsutism

Cause: Pituitary adenoma of the pars intermedia

55. Flounder

MD: Xenoma

Condition: Microsporidiosis

Agent: *Glugea stephani*

56. Frog

MD: Ulcerative dermatitis, chronic, multifocal

Causes: *Aeromonas hydrophila* and other aeromonids, pseudomonads, and enterobacteria (Citrobacter, Proteus, and Salmonella), as well as gram-positive bacteria such as Streptococcus and Staphylococcus. *Flavobacterium meningosepticum*: *Mycobacterium* spp.

57. Cow

MD: gangrenous and fibrinous epicarditis

Cause: Hardware and aerobic and anaerobic bacteria inoculated

Pathogenesis: Hardware about 8 inches, reticulum, penetration into reticular wall diaphragm, pericardial cavity with secondary bacterial infection

58. Pig

MD: Uterine leiomyoma

59. Harbor seal

Condition: Gastric anisakiasis

Causes: *Anisakis* spp. *Contracoecum* spp, *Pseudoterranova* spp.

60. Calf

Condition: Dicephaly

61.

MD: Cutaneous sarcoma, multifocal

Condition: Walleye dermal sarcoma

Cause: Retrovirus