FACULTY	HEALTH SCIENCES AND VETERINARY MEDICINE		
SCHOOL	VETERINARY MEDICINE		
DEPARTMENT	PARA-CLINICAL		
SUBJECT	GENERAL PATHOLOGY		
SUBJECT CODE	V3720AG		
DATE	NOVEMBER 2024		
DURATION	3 HOURS	**MARKS**	150

FIRST OPPORTUNITY EXAMINATION

Examiners: Dr D. Mudimba & Dr J. Yabe

Internal Moderator: Prof C. Nahonshikira

External Moderator: Prof G. Marucchella

This Exam paper consists of 8 (eight) pages including this front page.

Instructions:

1. Follow the instructions preceding each section
2. Answer all questions
3. Write neatly and legibly
4. Please be reminded that cheating in the examination will result in a failing grade
5. **Hand in this question paper together with the answer booklet**

QUESTION 1. [10]

The pictures below are some specimen obtained from a pig at post mortem.

A



Neudamm, 2023

B



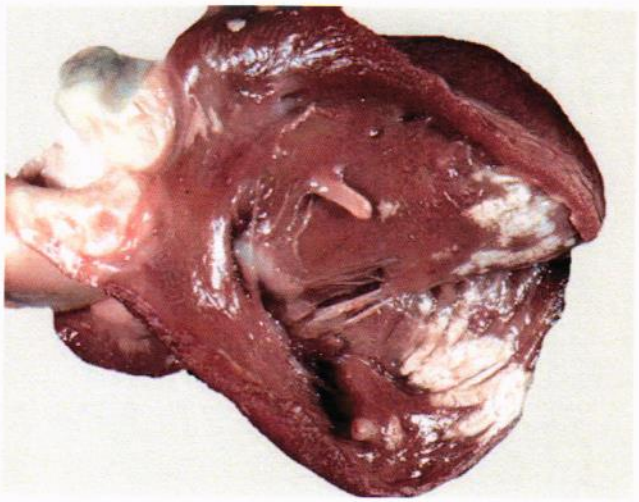
Neudamm, 2023

a. Give the diagnosis and process of the lesions shown in both A and B. [1]
b. Describe how this lesion develops. [7]
c. Name the cause of such a lesion. [1]
d. Give the post-necrotic structure that is shown in both pictures. [1]

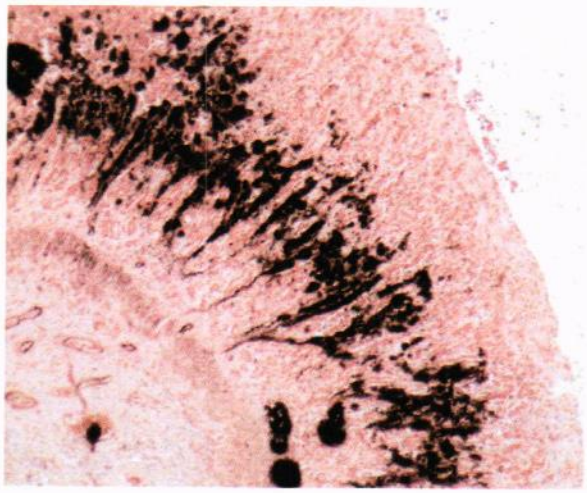
QUESTION 2. [10]

The heart shown in the photomicrograph (A) and photomicrograph (B) below were obtained from a lamb at postmortem.

A



B

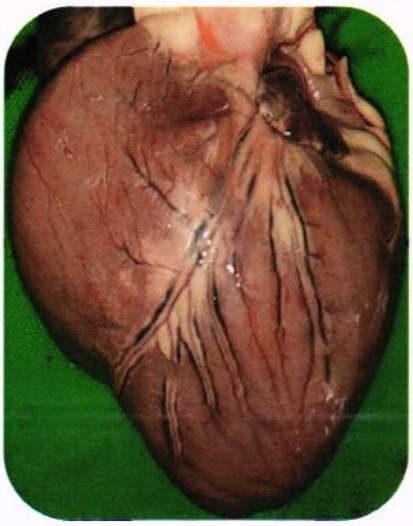


a. Describe the gross lesions seen in the photomicrograph **A**. [2]
b. What condition would you suspect in photomicrograph **A**? [1]
c. What stain was used in the photomicrograph **B** for confirmation? [1]
d. Describe the pathogenesis of the condition above. [5]

QUESTION 3. **[19]**

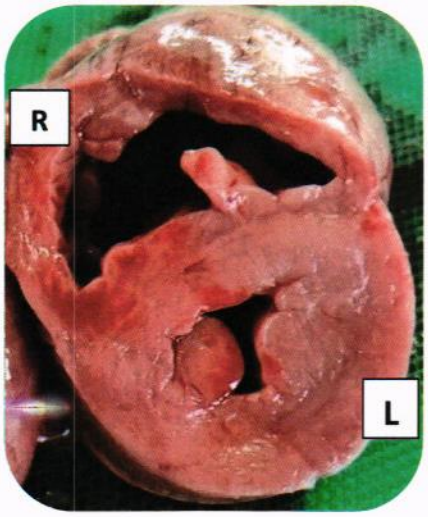
The two (2) photograph **A** and **B** below are from a 2-year-old female Boerbull that collapsed and died suddenly after showing clinical signs that are indicative of heart failure. Photomicrograph **B** was cut from photomicrograph **A**

A



Neudamm, 2023.

B



Neudamm, 2023.

a. Describe the significant gross pathological findings as shown in photograph **A** and **B** above. [3]

Photograph A

Photograph B

b. Name the adaptative change shown in the heart in photomicrograph B. [1]

c. Give the possible causes of the adaptive change shown in photomicrograph **B.** [5]

d. Discuss the pathogenesis of how this adaptive change in photomicrograph B could have developed (suppose these changes where on the right side of the heart). [10]

QUESTION 4. **[18]**

The picture below was taken from a cat that died of hepatotoxicity.

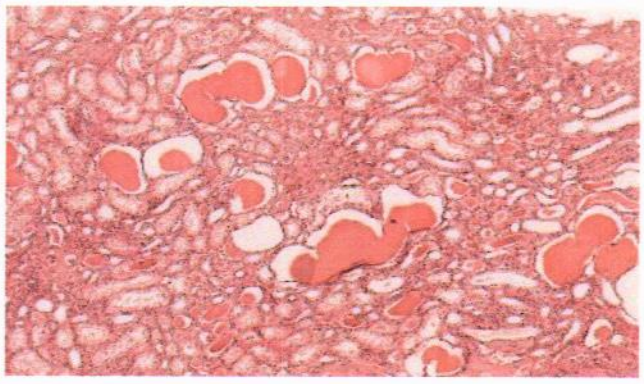


a. Describe the lesion shown in this picture. [2]
b. Name the lesion seen in the picture. [1]

c. Discuss in detail the causes of this condition. [15]

QUESTION 5 -The picture below was obtained from a dog that died after increased urine output and water intake. **[15]**

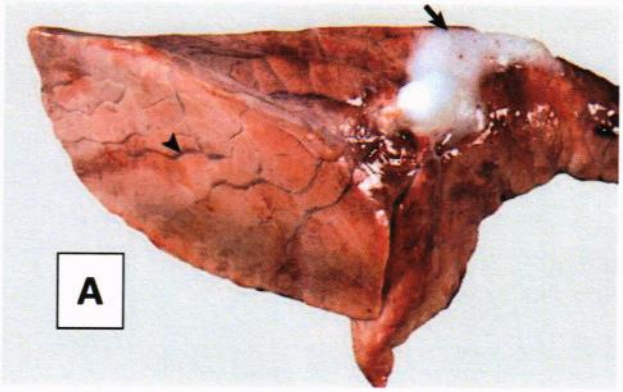


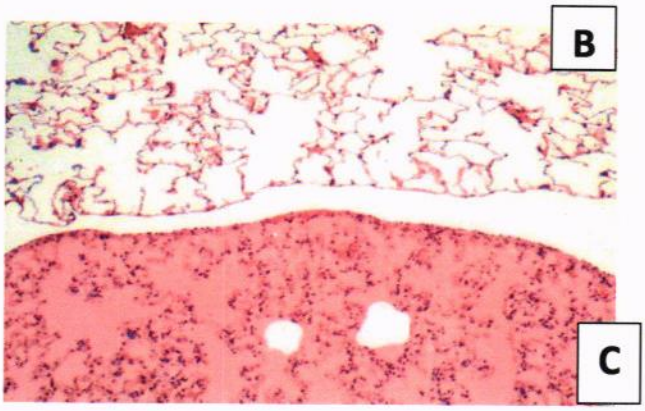


a. Describe the gross lesions seen in the picture (left) [2]
b. Describe the lesions seen in the photomicrographs (right) [2]
c. Name the lesion seen in this condition. [1]
d. Name the stain used in the photomicrograph to confirm this condition. [1]
e. Discuss the classification of this condition. [7]
f. Discuss the general effects of this condition in tissues where it occurs. [2]

QUESTION 6. **[18]**

The gross picture (left) and photomicrograph (right) were obtained from a cow that had a history of respiratory distress.





a. Describe the gross lesions seen in picture **A**. [3]

b. Give your diagnosis of the lesions seen in picture **A**. [1]

c. Describe any other gross lesions that can be associated with the diagnosis that you gave in 3b above. [4]

d. Describe the lesions seen in picture **C**. [2]

e. Give your diagnosis of the lesions seen in picture **C**. [1]

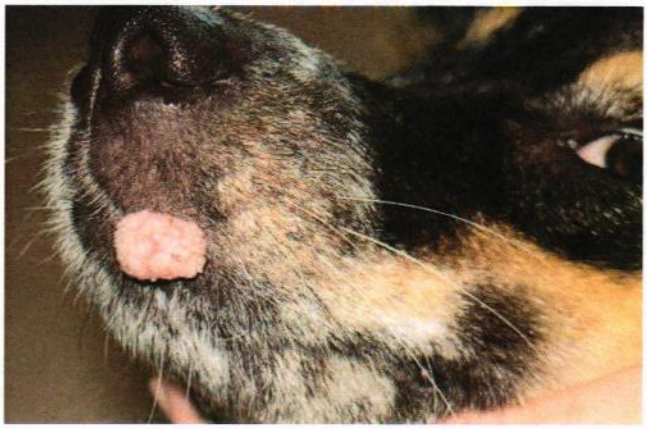
f. Describe any other microscopic lesions that can be associated with the chronic condition of the diagnosis that you gave in 3b above. [4]

g. Discuss how the lesions seen in picture **C** develop. [4]

QUESTION 7: **[10]**

PART A [6]

The gross picture (left) and photomicrograph (right) shown below were obtained from a dog.





a. Describe the gross lesions seen in the picture and its location. [2]
b. Describe the microscopic lesions in the photomicrograph. [1]
c. What condition would you suspect? [1]
d. Is this benign or malignant. [1]

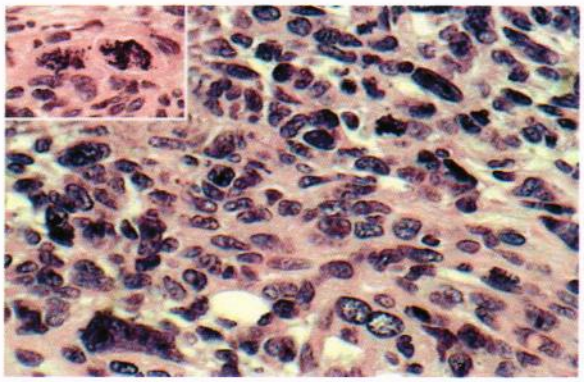
PART B. [4]

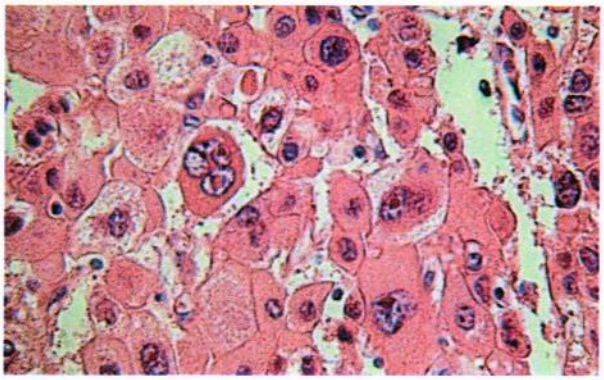
a. Define metastasis and describe the various routes of metastasis. [4]

QUESTION 8. **[10]**

PART A. [5]

The photomicrographs shown below were obtained from a neoplasm. Examine them and answer the following questions.





a. Describe the microscopic lesions in the picture on your left-hand side. [2]
b. Describe the microscopic lesions in the picture on your left-hand side. [2]
c. What characteristic feature of neoplasms are the pictures showing? [1]

PART B

a. Compare and contrast malignant vs benign tumours. [5]

QUESTION 9. **[10]**

Using appropriate examples, describe the various clinical aspects of neoplasia.

QUESTION 10. **[10]**

PART A - Describe the various components of an inflammatory process. [5]

PART B – Name and briefly describe the gross and microscopic lesions that are produced by *Mycobacterium tuberculosis* in the lungs of ruminants. [5]

QUESTION 11. **[10]**

The picture below shows a wound in a lower limb of a horse.



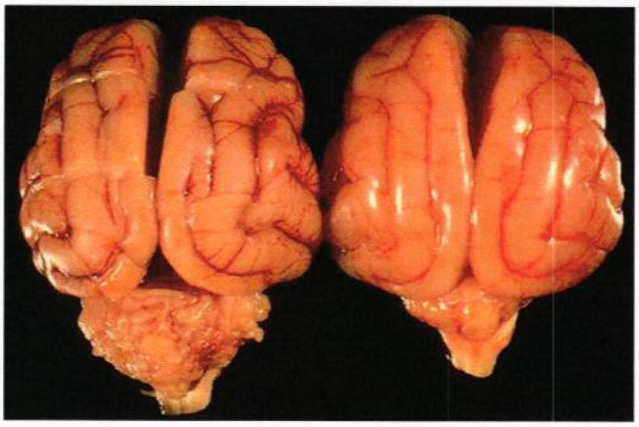
a. Name the lesion you see on the picture. [1]

b. Briefly describe the general stages of wound healing. [5]

c. Describe the factors that would impair wound healing on the limb above. [4]

QUESTION 12. **[10]**

PART A: The picture below shows brains from 2 cats from the same litter. [5]



a. Describe the lesions seen in one of the pictures above. [1]

b. Name the lesion described above. [1]

c. What clinical complication would you see in the case above? [1]

d. Name the etiological agent for such a lesion in cats. [1]

e. Name the disease/etiological agent for such a lesion in cattle. [1]

PART B:

Describe the pathogenesis and pathological features of Barrett oesophagus. [5]

~~~END OF FIRST OPPORTUNITY EXAMINATION ~~~