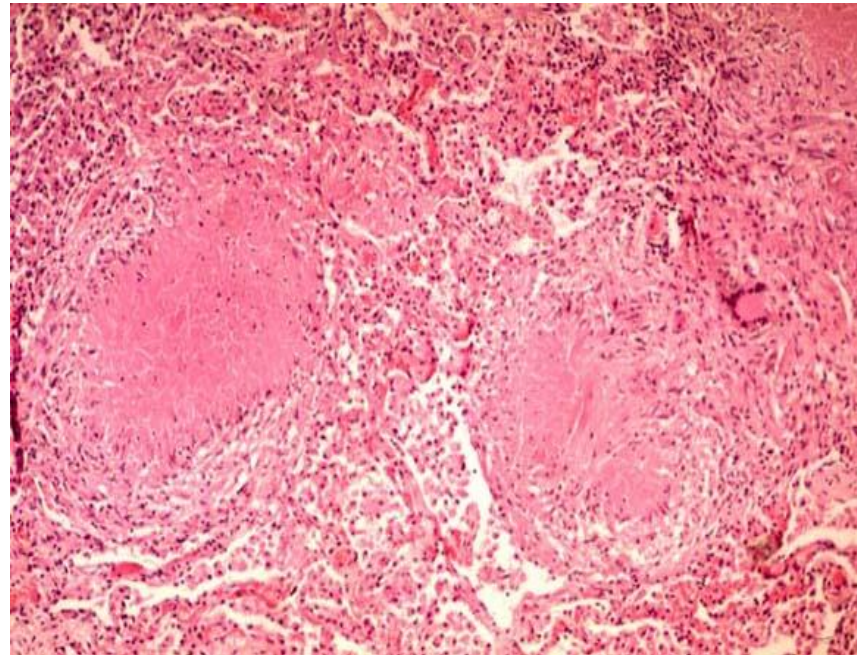


**M.J.F. COLLEGE OF VETERINARY AND ANIMAL SCIENCE,
CHOMU, JAIPUR**

DEPARTMENT OF VETERINARY PATHOLOGY



POST-MORTEM EXAMINATION

- ▶ Examination of an animal after death to establish the diagnosis. Also known as *Necropsy in animals and birds* and *Autopsy in human being*. It forms the base for study of pathology.



Macroscopic or Gross Pathology

Examination of tissue or organ with naked eye or without aid of microscope. Include alteration in color, shape, size, consistency, abnormal locations of extraneous agents etc.

Microscopic Pathology / Histopathology

Examination of cells, tissue or organ with the use of microscope. This implies the use of stained tissue sections after processing

Lesion

- ▶ Pathological alteration in structure of a cell, tissue or organ on account of injury that can be detectable. (Mark of damage) can be Macroscopic (gross lesion) or Microscopic



HOMEOSTASIS

- ▶ Mechanism by which body keeps equilibrium between health and disease. *e.g.* Adaptation to an altered environment.

Etiology

- ▶ Study of causation of disease.
- ▶ A knowledge of causative agent is required for its prevention
- ▶ Two major classes of causes
- ▶ 1. Genetic/ Intrinsic-Genus, Age, Sex,breed, Colour etc.
- ▶ 2. Acquired or Extrinsic- Physical,Chemical, Biological, Nutritional etc.

Diagnosis

- ▶ **Diagnosis is an art of precisely knowing the cause of a particular disease (*Dia*= thorough, *gnosis*= knowledge).**
- ▶ **Art of determination of nature of disease.**
- ▶ **To know the disease through clinical signs, lesions, laboratory tests**

SYMPTOMS / SIGNS

- ▶ Outward manifestation of the animal suffering from disease.
- ▶ Any subjective/ objective evidence of disease of animal characterized by an indication of altered bodily or mental state as told by owner or observed by clinician. (Complaints of the patients).

PATHOGENESIS

- ▶ Progressive development of a disease process. It starts with the entry of cause in body and ends either with recovery or death.
- ▶ It is the mechanism by which the etiological agent produce the disease.

Pathognomic lesion

- ▶ This is specific alteration or lesion seen in a specific disease. The lesion that pinpoints the disease
- ▶ Specific alteration that indicates without doubt about cause of a particular disease.
- ▶ I/C inclusion in neurones (Negri bodies)-Rabies
- ▶ I/N inclusions in hepatocytes-ICH
- ▶ Button shaped ulcers in intestine- Swine Fever
- ▶ Punched ulcers in abomasum- Theileriasis
- ▶ Zebra marking in large intestine-Rinderpest
- ▶ Intestinal corrugations- Johne's disease

INCUBATION PERIOD

- ▶ Time lapses between the action of a cause and manifestation of disease.
- ▶ Rinderpest- 4-9 days
- ▶ Marek's disease- 4-5 weeks

COURSE OF DISEASE

- ▶ **Duration for which the disease process remains till fate either in the form of recovery or death.**

PROGNOSIS

- ▶ **An estimate by a clinician of probable severity/ outcome of disease (Forecasting about likely course and outcome of a disease)**
- ▶ **Prognosis may be recovery or death or invalidism.**

MORBIDITY RATE

▶ Percentage of affected animals out of total population in a particular disease outbreak.

e.g. Out of 100 animals, 20 are suffering from diarrhoea. The morbidity rate of diarrhoea will be 20%.

MORTALITY RATE

▶ Percentage of animals died due to disease out of total population in a particular disease outbreak.

e.g. In a population of 100 animals, 20 falls sick and 5 died. The mortality rate will be 5%.

CASE FATALITY RATE

- ▶ Percentage of animals died among the affected animals.
- ▶ In a population of 100 animals, 20 falls sick and 5 died. The case fatality rate will be 25%.

Biopsy

- ▶ **Examination of tissues received from living animals for the purpose of determining the cause of a disease.**
- ▶ **A biopsy is usually performed in a suspected case of cancer**

Infection

- ▶ **Invasion of pathogenic organisms in the tissues of the body resulting in the development of a disease process**

Infestation

- ▶ **Superficial attack of any parasite/organisms on the surface of body.**

Pathogenicity

- ▶ **Capability of an organism for producing a disease.**

Oncology

- ▶ **Study of cancer/ tumor/ neoplasms**



Syndrome

- ▶ It is a group of symptoms that occur together and characterize the particular abnormality. (Set of symptoms which occur together)