



# Veterinary Public Health & Epidemiology

## Bihar Veterinary College, Patna

### Lecture on Post Mortem examination of Food Animals


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# Key principles

- ▶ Take into account ante mortem inspection results
- ▶ Carcasses and accompanying offal are to be subjected **without delay** after slaughter to post mortem inspection
- ▶ All external surfaces are to be viewed
- ▶ Examination of lymph nodes is very important
- ▶ All inspections must be carried out with due regard for hygiene
- ▶ It is the duty of inspecting staff to arrange for the stamping of the carcasses when passed or condemned.
- ▶ The prevention of contamination must be the aim rather than post production contamination reduction by different means

# Precautions

- ▶ Minimal handling of the carcass & offal should take place
- ▶ Precautions must be taken to ensure that contamination of the meat by actions such as palpation, cutting or incision is kept to a minimum
- ▶ Inspection staff should pay particular attention to the detection of zoonotic and notifiable diseases

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- ▶ Postmortem inspection should provide necessary information for the scientific evaluation of pathological lesions pertinent to the wholesomeness of meat
  - ▶ Professional and technical knowledge must be fully utilized by Viewing, incision, palpation and olfaction techniques

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- ▶ Coordinating all the components of ante mortem and postmortem findings to make a *final diagnosis*
  - ▶ Submitting the samples to the laboratory for diagnostic support, if abattoir has holding and refrigeration facilities for carcasses under detention

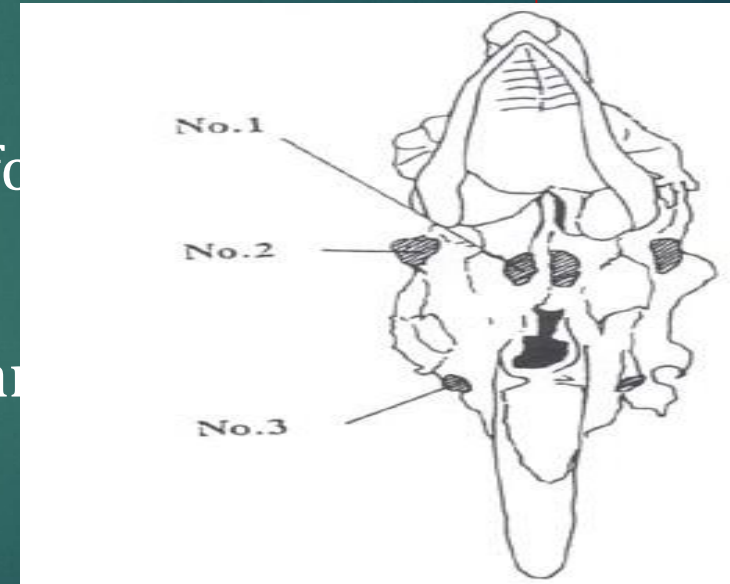


- ▶ **Erysepalas** – **swine fever** – urticaria – skin lesions
- ▶ Abscess – feet
- ▶ Mastitis, Actinomycosis – udder
- ▶ Necrosis – Tail
- ▶ **Cyst. cellulosa**e - Ext. masseter Muscles, Root of tongue
- ▶ Muscles – **trichinosis**
- ▶ Visceral organs- pericarditis, peritonitis, pneumonia
- ▶ Submax. LNS – **T.B**

# Post-Mortem Procedures

## HEAD

- ▶ View head including exposed muscle surfaces
- ▶ Incise and view mandibular lymph nodes
- ▶ Incise internal and external masseter muscle for  
C. bovis
- ▶ View head lymph nodes like retropharyngeal and  
parotid for tuberculous lesion
- ▶ View tongue



Head inspection. Retropharyngeal (No. 1), parotid (No. 2) and submaxillary (No. 3)





# Tongue

- ▶ Where there is a risk of *Cysticercus cellulosae* being present, the outer muscles of mastication, the abdominal and diaphragmatic muscles and the root of the tongue of all pigs should be incised and the blade of the tongue viewed and palpated

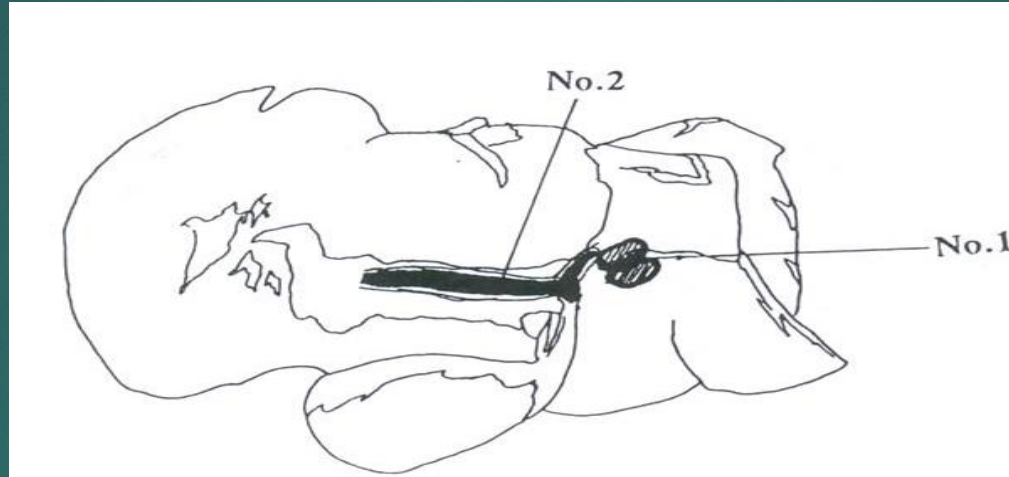
# VISCERA

## Gastro-Intestinal Tract

- ▶ View esophagus
- ▶ View spleen (Anthrax, T.B)
- ▶ View stomach
- ▶ View omentum
- ▶ View intestines
- ▶ View and palpate mesenteric lymph nodes (T.B)

# Liver

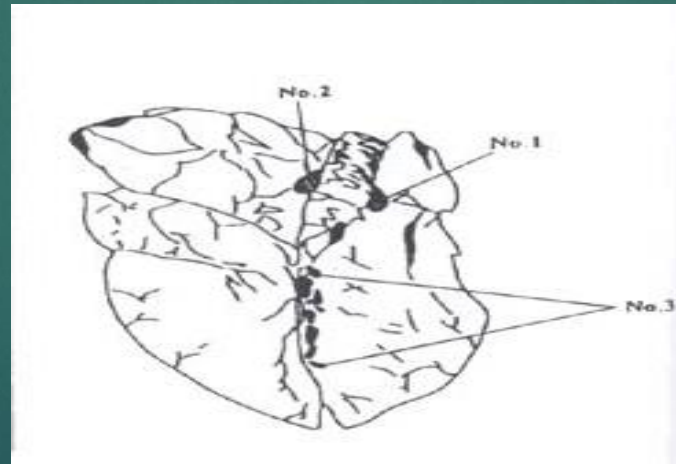
- ▶ View parietal and visceral surfaces (Abscess, Hydatid cyst)
- ▶ View and palpate hepatic lymph nodes



Liver inspection - Incised portal (hepatic) lymph nodes (No. 1) and opened large bile duct (No. 2)

# Lungs

- Open and view trachea and main branches of bronchi
- Incise and view mediastinal lymph nodes
- Incise and view tracheo-bronchial lymph nodes (BOTH FOR T.B)
- Make a transverse cut into posterior third of lungs



Lung inspection - Bronchial left (No. 1) and right (No. 2) and mediastinal (No. 3) lymph nodes

## Heart

- View pericardium (T.B. pericarditis)
- View heart

- **Diaphragm**
- View both sides **Kidneys**
- View kidneys
- View renal lymph node

## Uterus

- View uterus



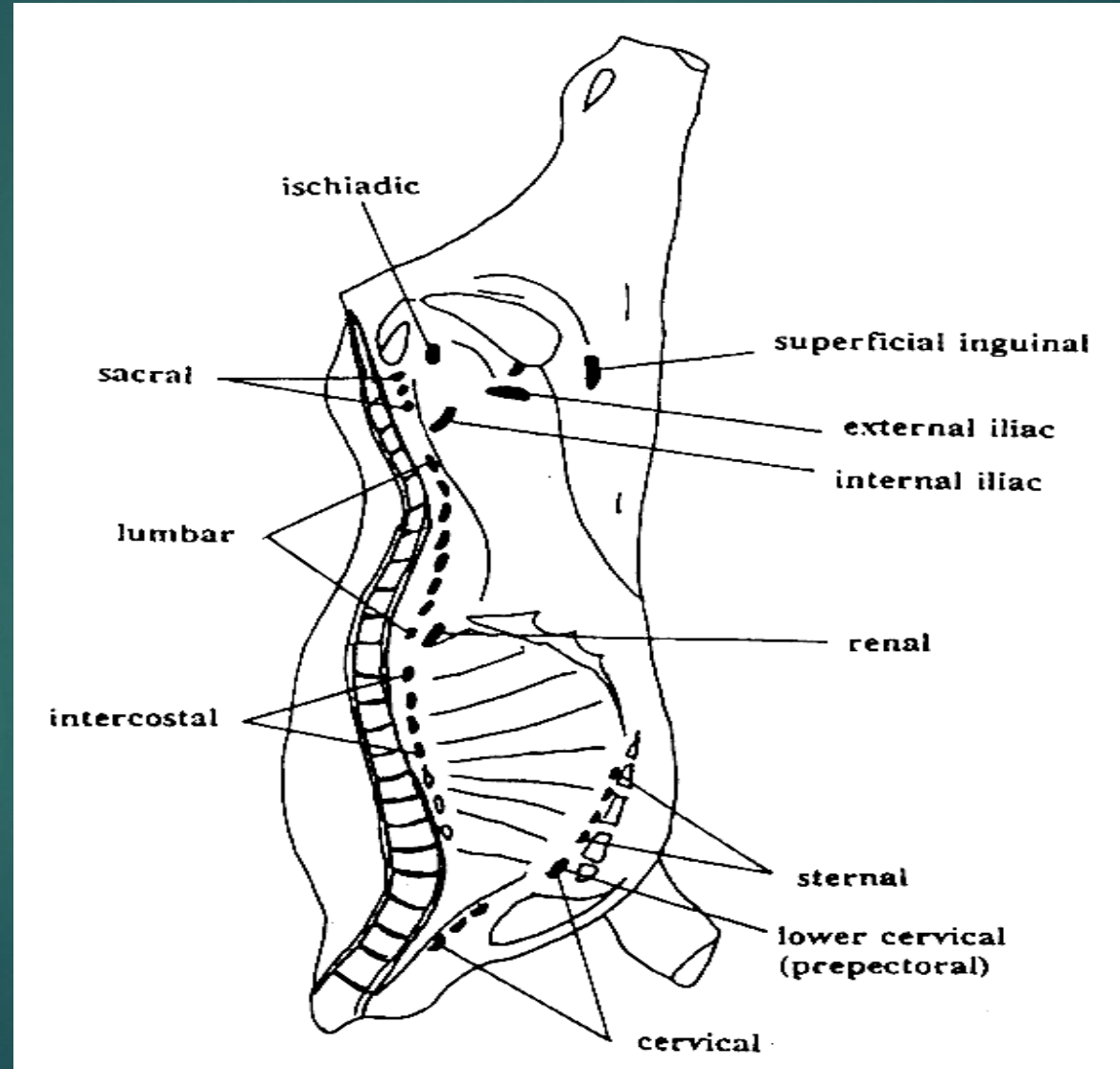
## Testicles and Epididymis

- ▶ View and palpate

## Carcass

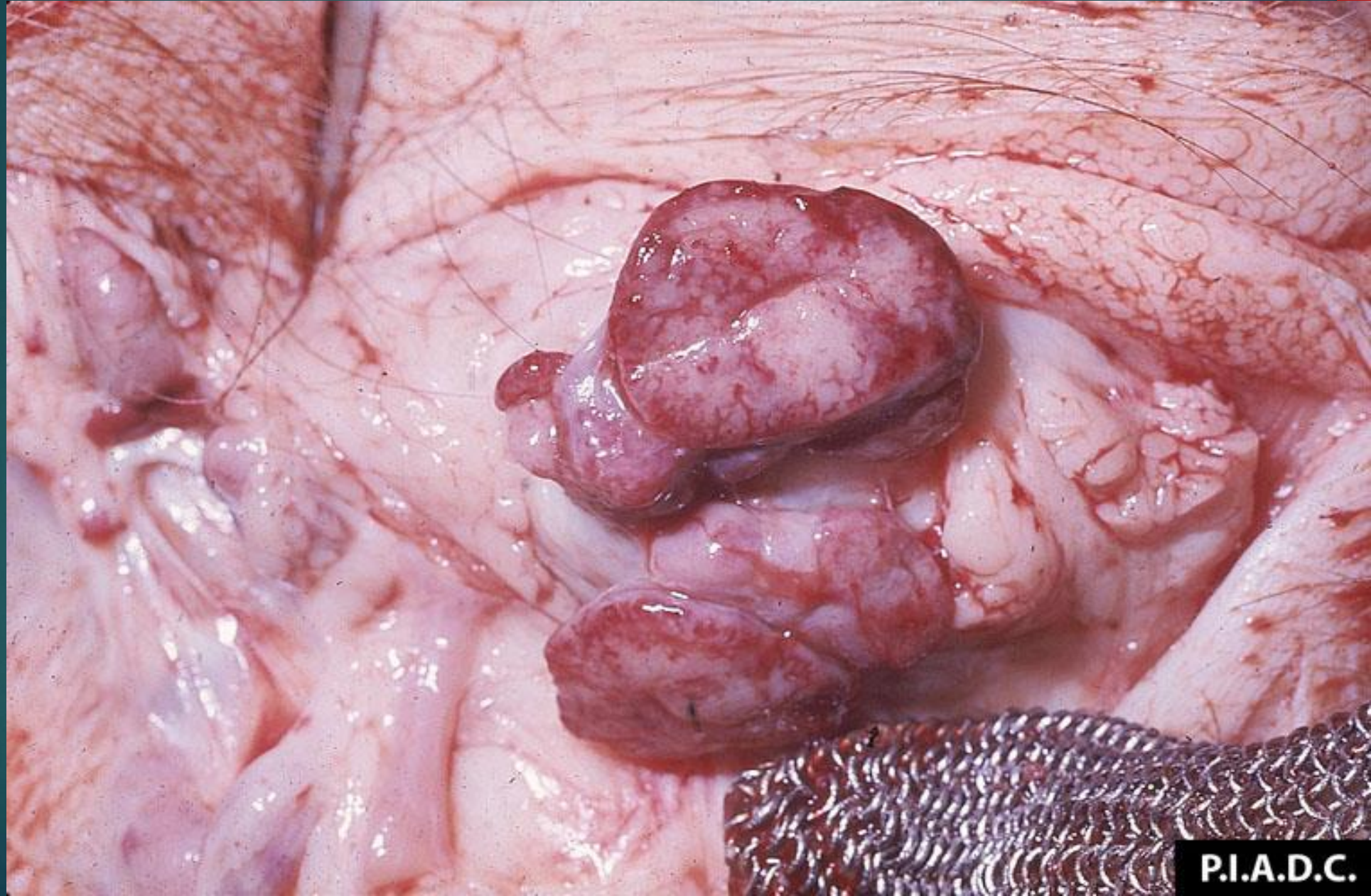
- ▶ View external surfaces of carcass
- ▶ View joints
- ▶ View & palpate scrotal area including castration wounds & scars
- ▶ View iliac lymph node
- ▶ View renal lymph node
- ▶ View pelvic, abdominal and thoracic cavities
- ▶ View & palpate mammary glands in adult breeding animals
- ▶ View and palpate supra mammary or superficial inguinal lymph nodes

# Medial view of carcass with relevant lymph nodes in pig





# Mandibular lymph node of pig



P.I.A.D.C.



Popliteal lymph nodes in a pig. These nodes are incised if a systemic or general disease is suspected



# JUDGEMENTS

- ▶ Passed
- ▶ Total condemnation
- ▶ Partial condemnation
- ▶ Conditionally passed



# Diseases and judgement

- ▶ **Anthrax** - Total condemnation
- ▶ **Brucellosis** - condemnation of genital organs, udder & assoc.LN'S
- ▶ **T.B – GEN** -Total condemnation  
    **LOC**- whole organ & asso. LN'S
- ▶ **Rabies** - Total condemnation
- ▶ **FMD** – acute febrile case- Total condemnation, O/W conditionally passed

# Diseases and judgement

Salmonellosis - Total condemnation

Swine fever - Total condemnation

Erysipelas –systematic- Total condemnation, O/W conditionally passed

Measly pork-heavy- Total condemnation, O/W conditionally passed

Trichinosis - Total condemnation

Hydatid cyst – liver and lung must be destroyed