World Organisation for Animal Health

IZS TERAMO

WOAH Reference Laboratory for CBPP

Regional Training Course on Abattoir Surveillance for Contagious Bovine Pleuropneumonia (CBPP)

24 – 27 March 2026, Nairobi, Kenya

COMESA SPS Project

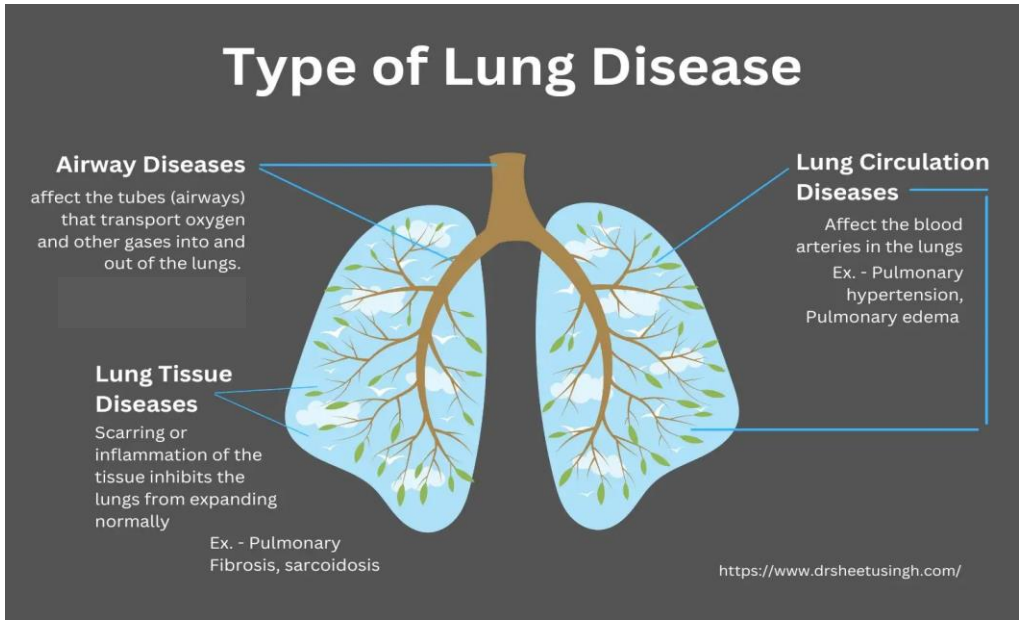
Lung: Most frequent lesions

Dr. Geoffrey M. Muuka (PhD)
Botswana National Veterinary Laboratory
WOAH CBPP Reference laboratory
CBPP Expert Designate

Preamble

These are general lesions that are found incident to disease or any other pathological or physiological condition that alters the normal state in the thoracic cavity or the lung.

These are usually a demonstration of the distrubances in the homeostasis.



Preamble continued

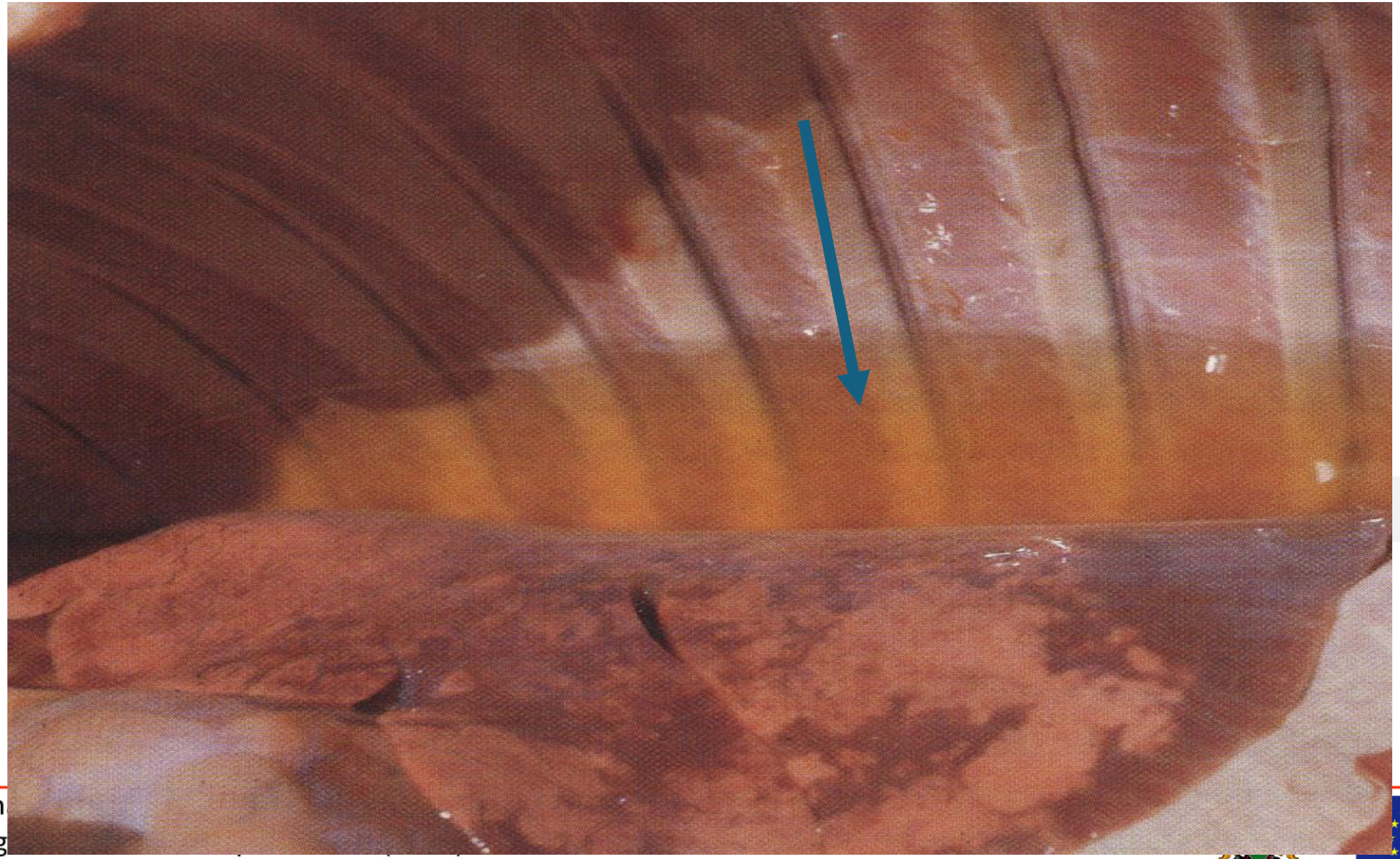
- Lesions can assist in determining the primary cause of the changes noted in the thoracic cavity.
- It is imperative to be thorough, watchful and ensure each change is well noted, characterised and recorded either by notes, pictures or both.
- It is never good to be opinionated from the preliminary findings as you commence your investigation
- Sometimes, more than one type of lesion maybe present and care should be taken not to obscure other lesions present

Hydrothorax

- Accumulation of fluid in the thoracic cavity.
- The quantity, colour and consistence vary from situation to situation and the cause
- Care should always be taken into consideration when opening carcasses in the thoracic cavity as the act may change the original characteristics of the fluid.

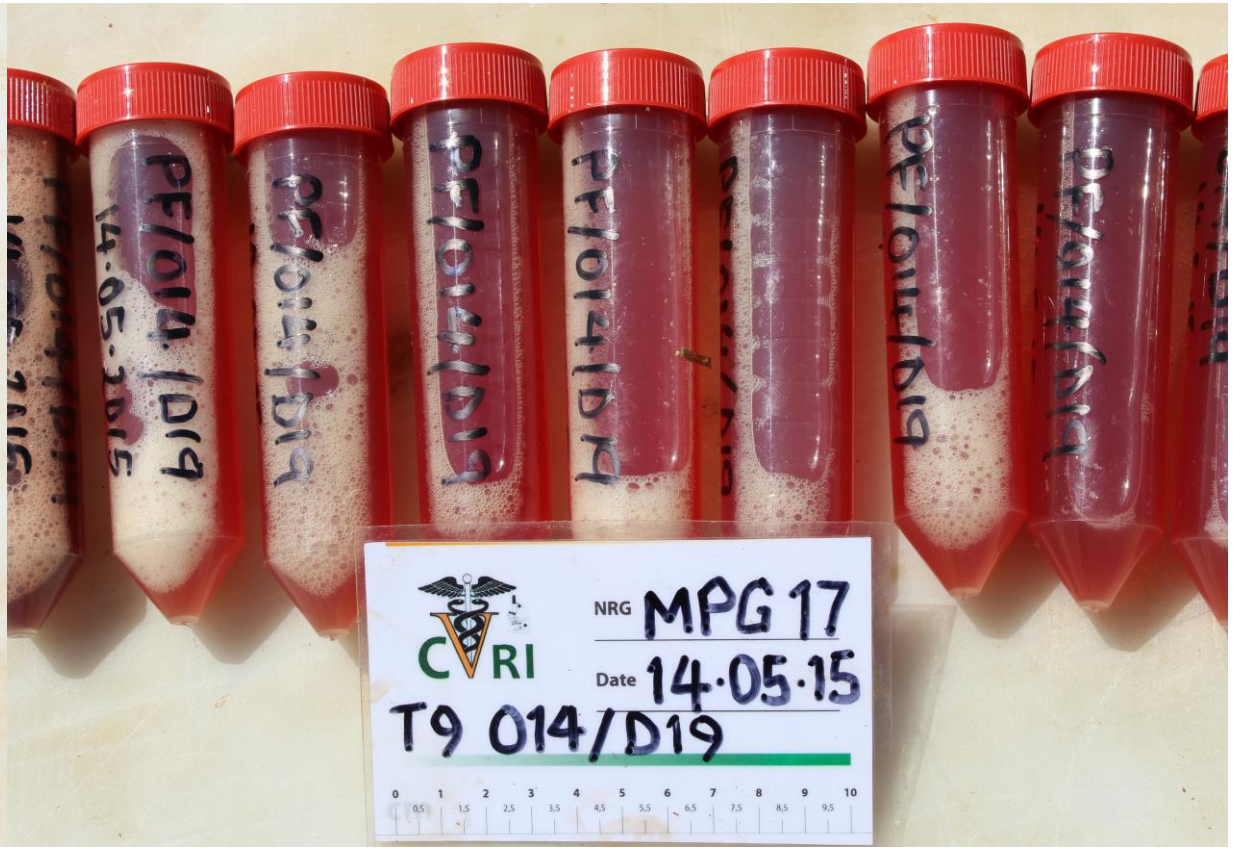
Hydrothorax; Heartwater

Hydrothorax; Heartwater



PLEURAL-FLUID

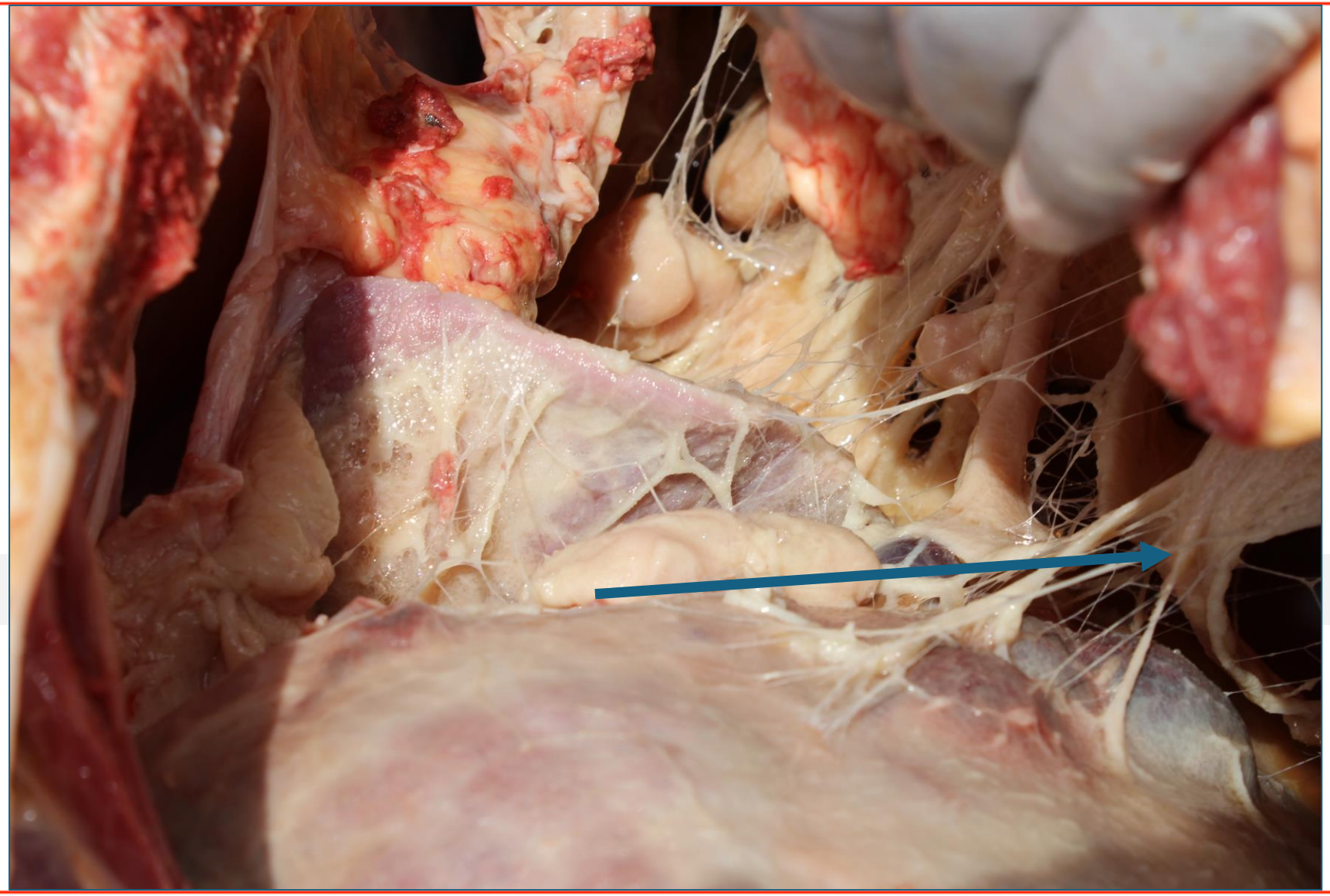
Pleura fluid



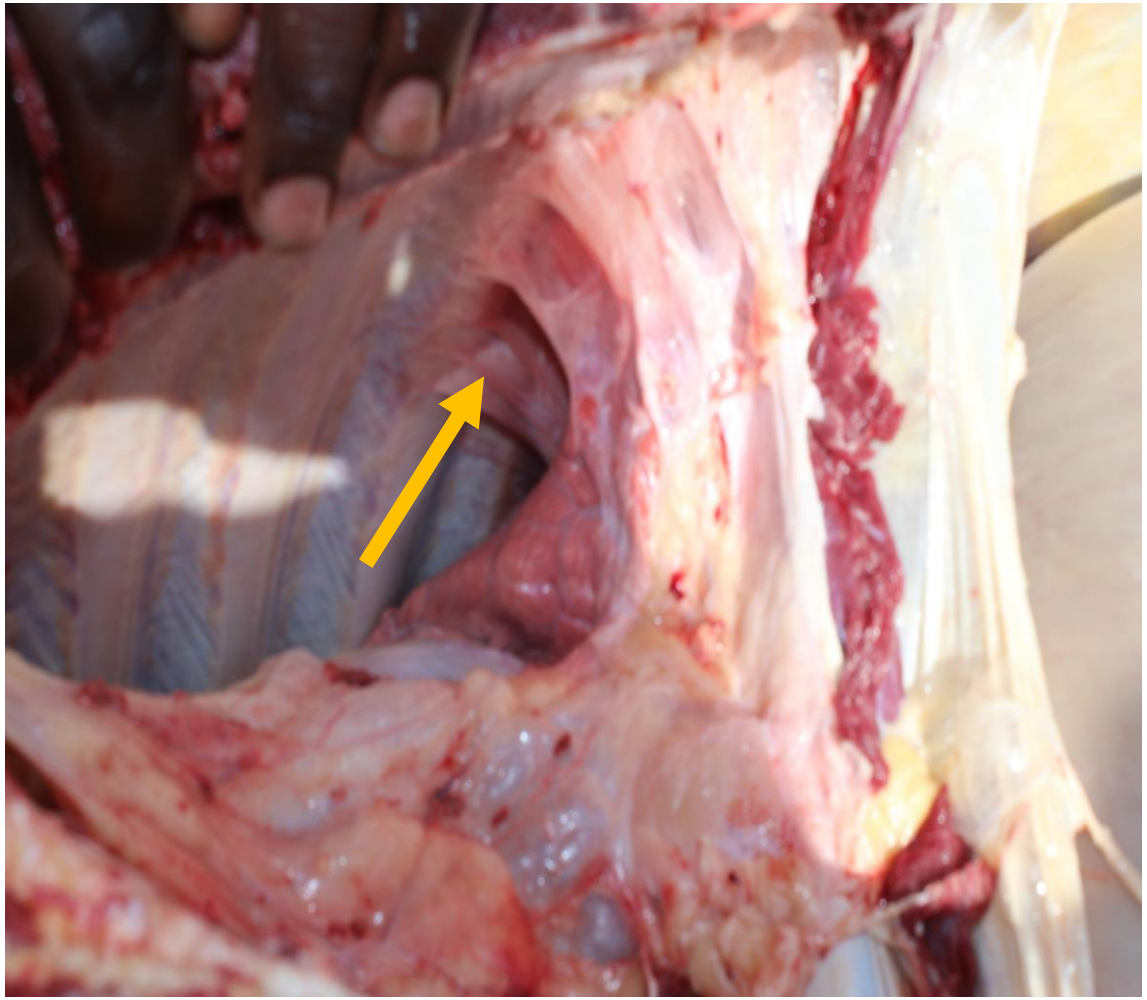
Pleuritis

- Pleurisy, also known as pleuritis, is inflammation of the membranes that surround the lungs and line the chest cavity (pleurae).
- The colour, consistence and extent will differ from causative agent to causative agent.
- Even with the same causative agent, there isn't uniformity on the resultant pleurisy seen

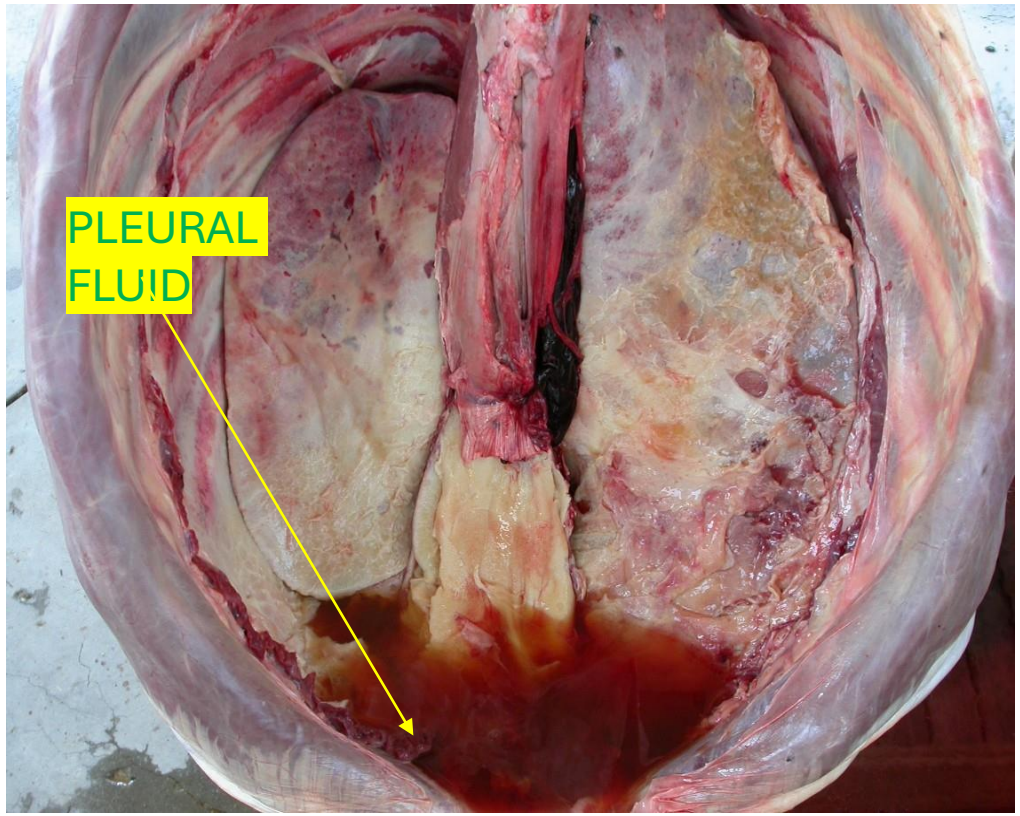
ADHESIONS

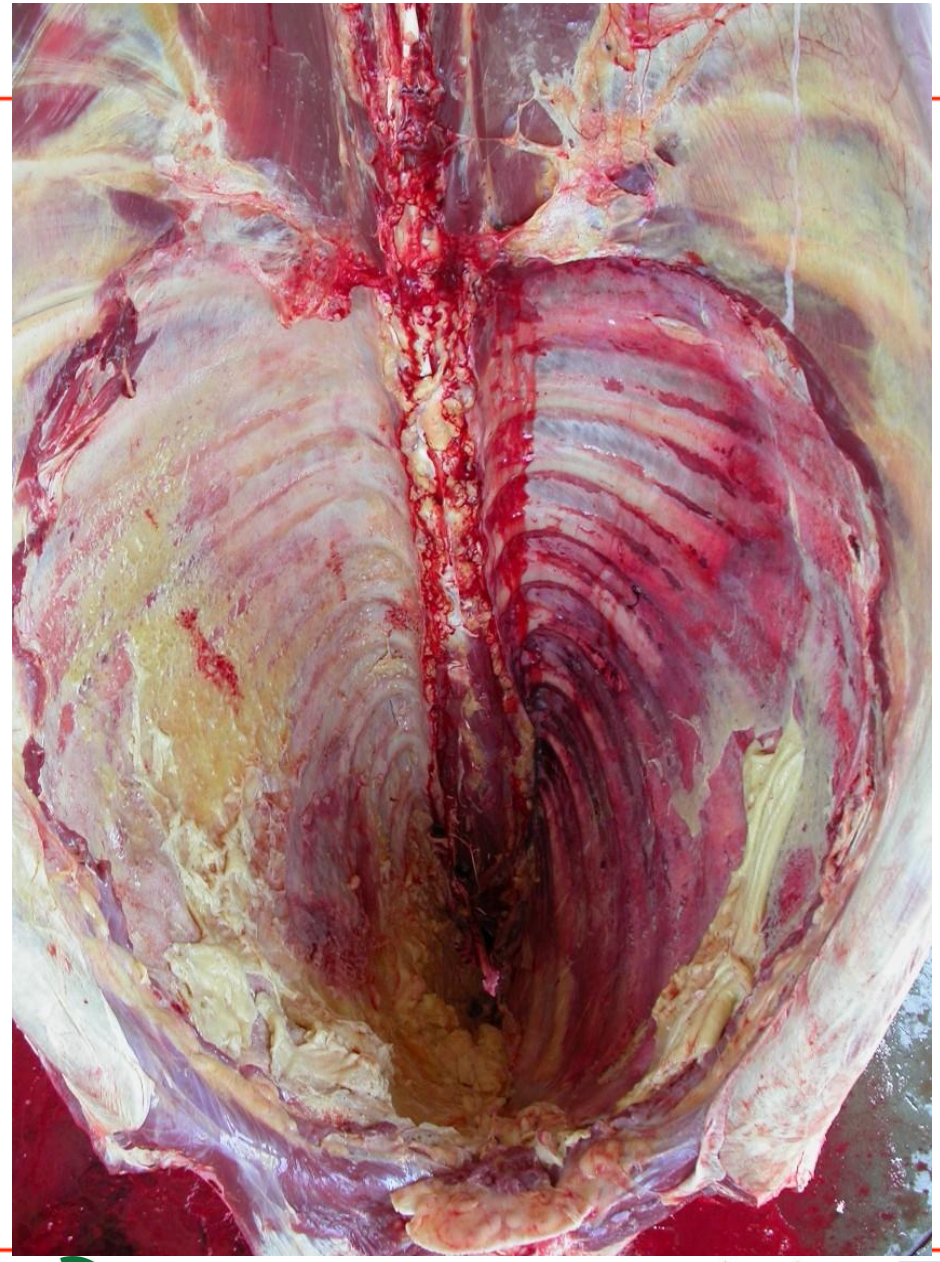


Adhesion



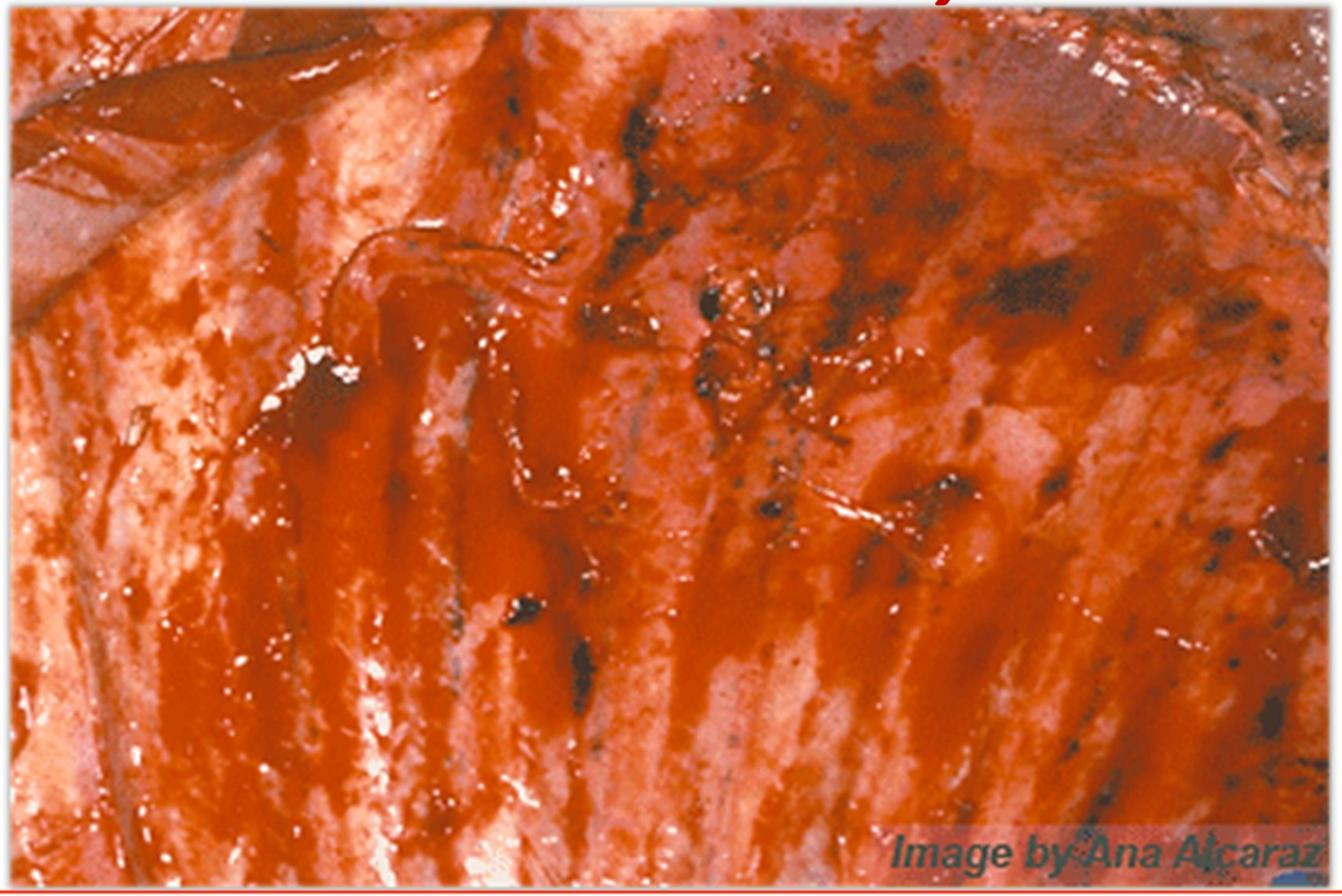
Pleuritis; CBPP



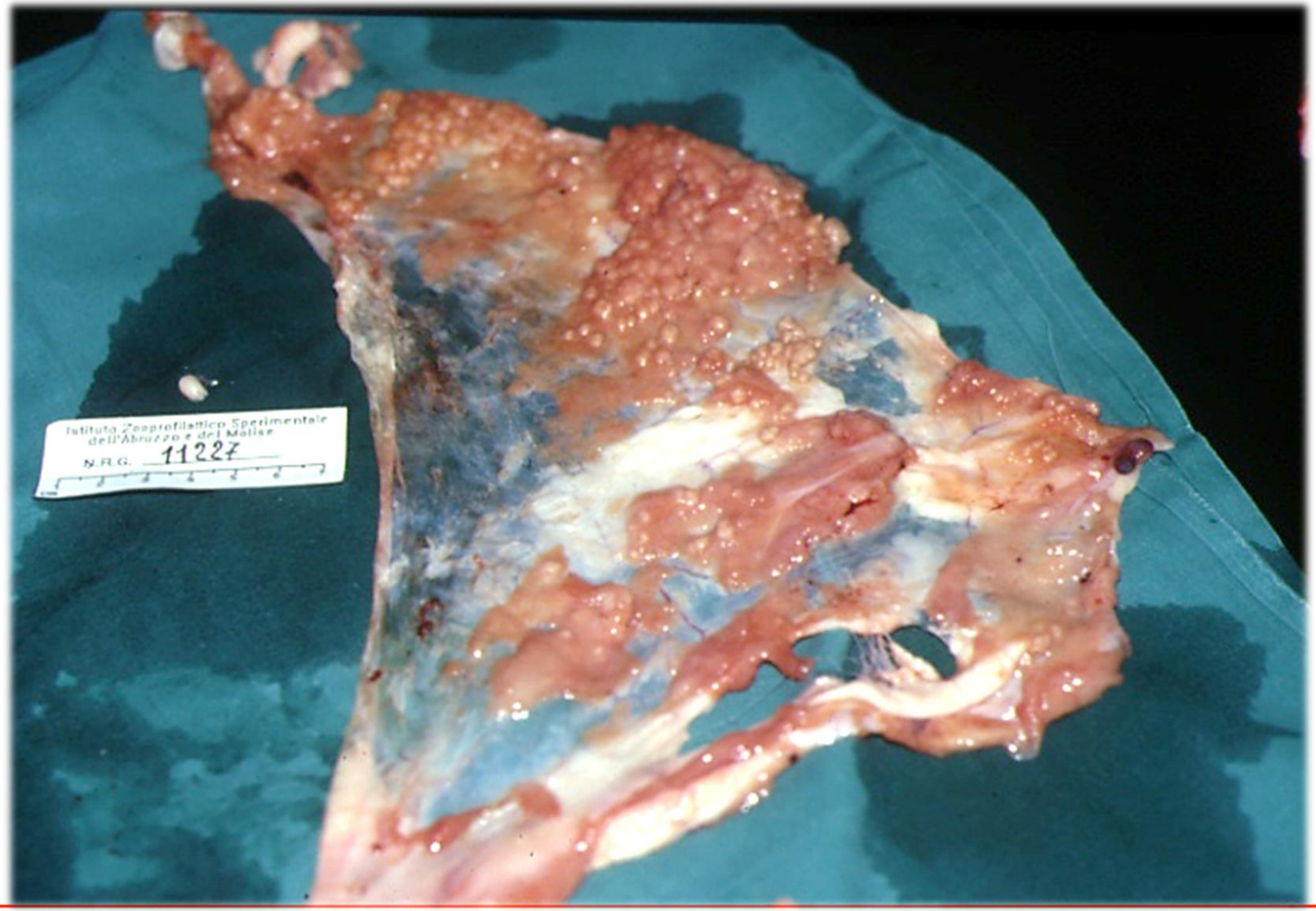


Pleuritis; Pasteurellosis

Mannheimia haemolytica



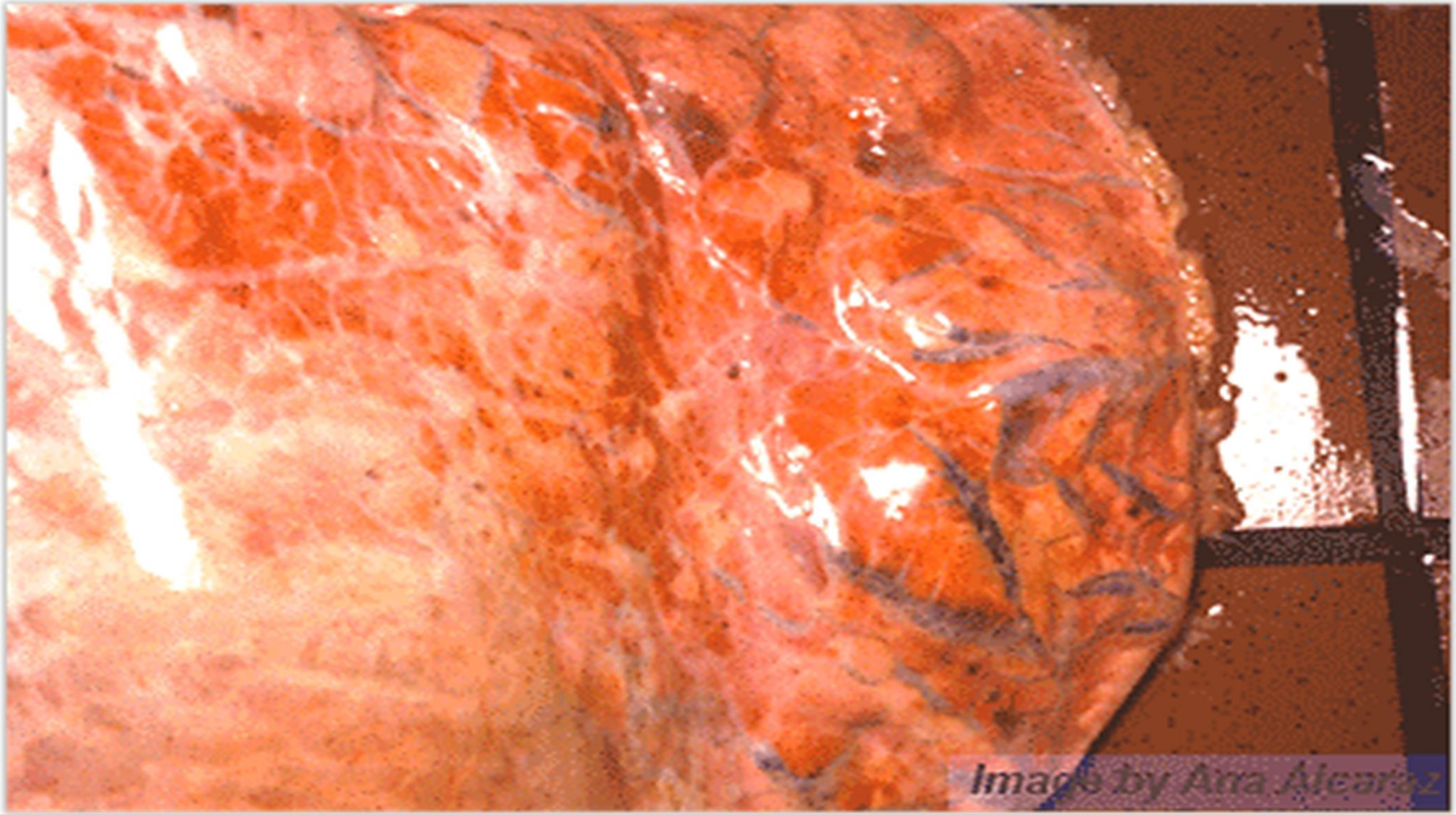
Necrotic caseous-calcific Pleuritis; TB



Emphysema

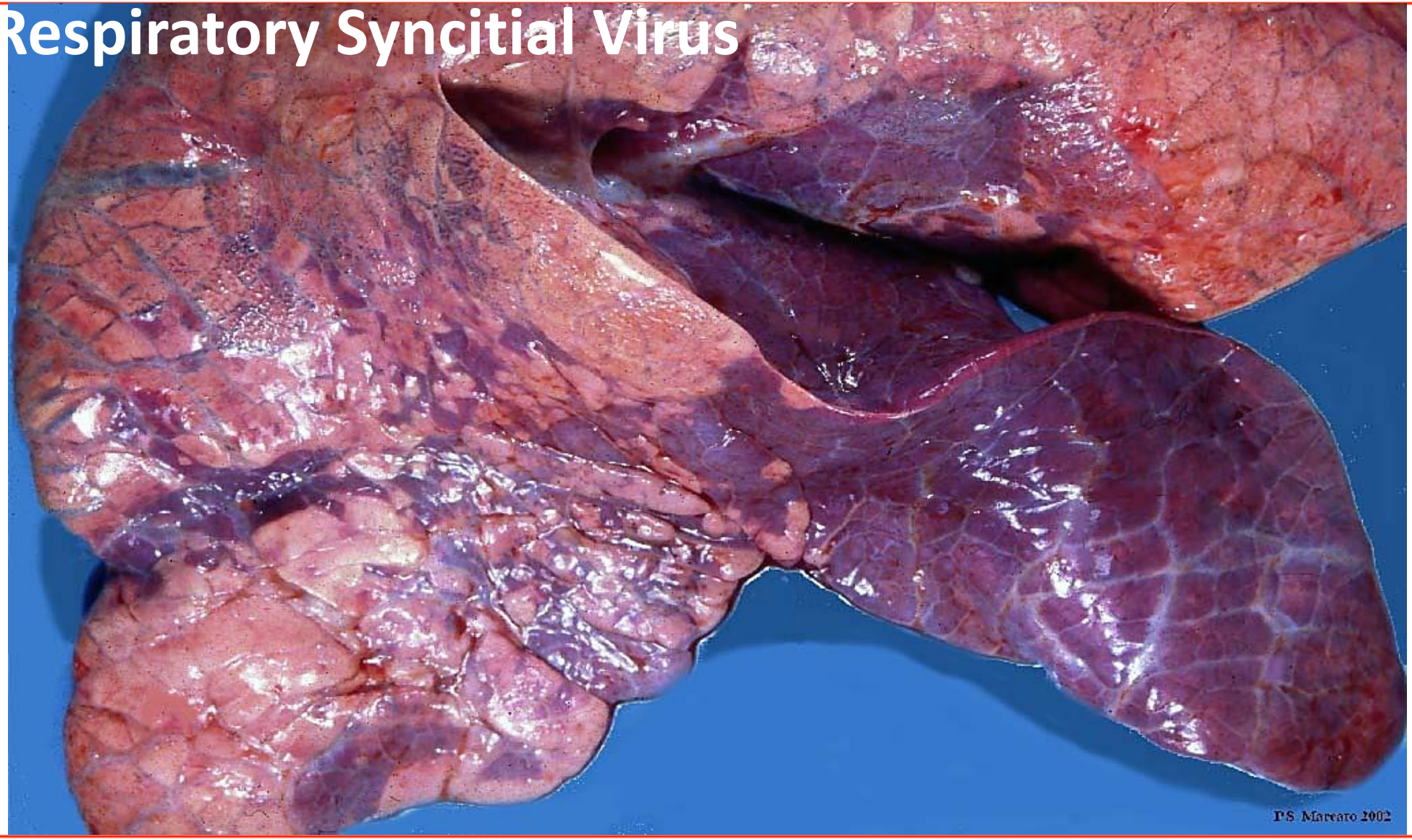
- Usually characterised by air-filled spaces in the lung, that can vary in size
- Breakdown of the aveolar walls results in trapping of air in the created spaces replacing the spongy lung tissue
- Several factors can precipitate the damage of the alveolar walls and its finding at postmortem should well noted and defined

Emphysema: Unknown



Emphysema: Bovine Respiratory Syncytial Virus

Respiratory Syncitial Virus

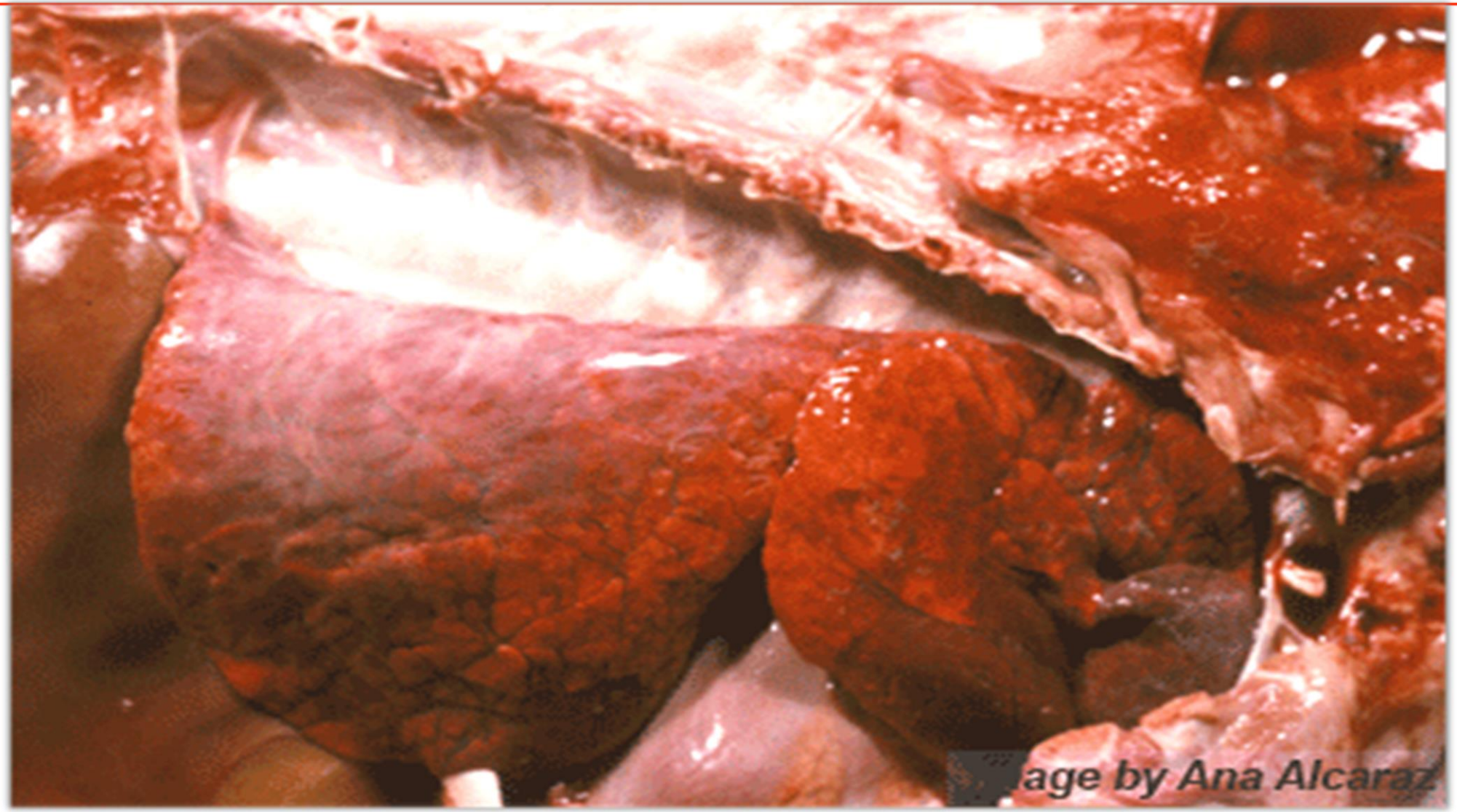


Pulmonary Congestion/Edema

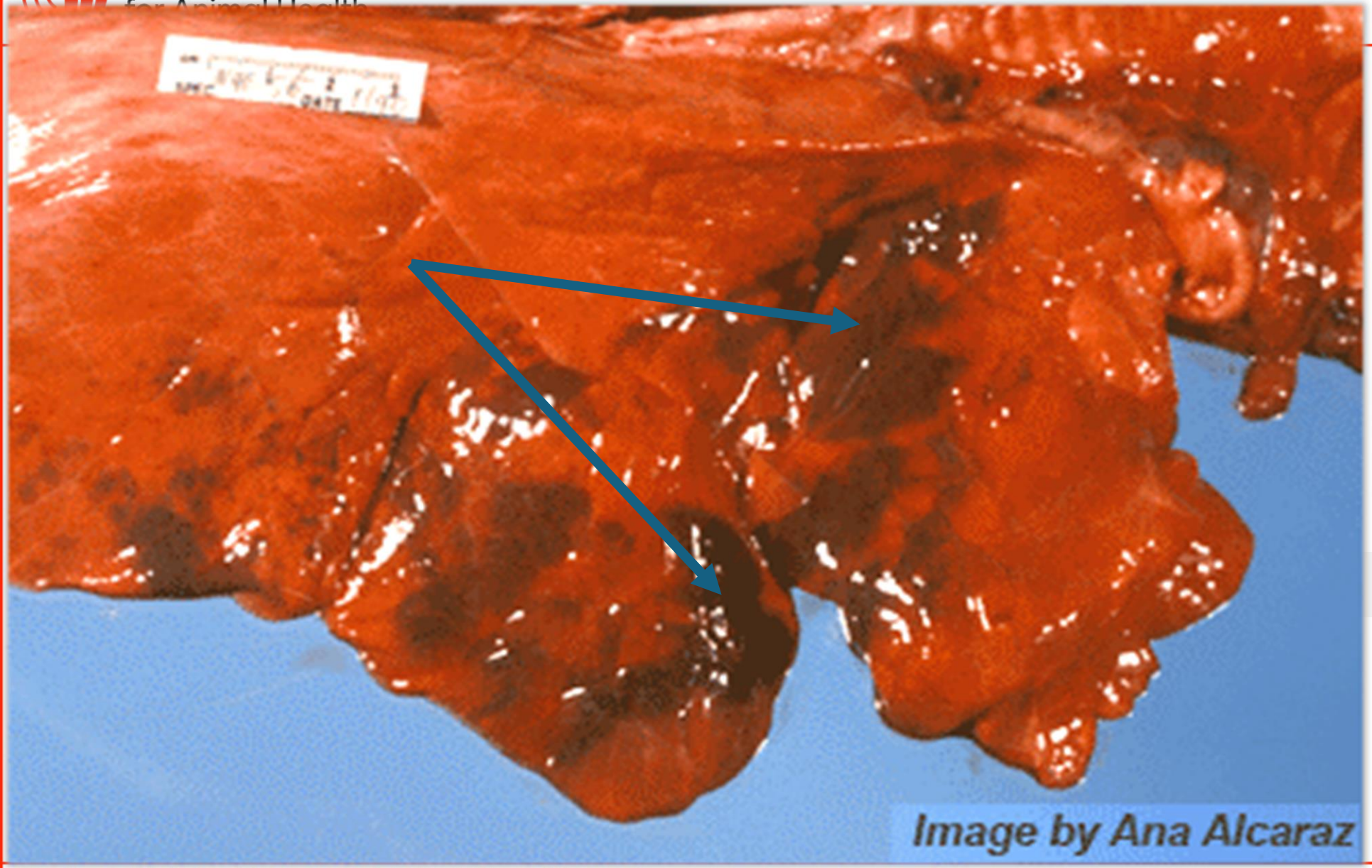
- Abnormal accumulation of fluids in the alveoli
- Usually seen as distension especially of alveoli septa
- Can be caused by multiple factors including; left-sided heart failure or high blood pressure, pneumonia, toxins etc.

Acute interlobular edema : Unknown

Air Infiltration: Bovine Respiratory Syncytial Virus Pneumonia

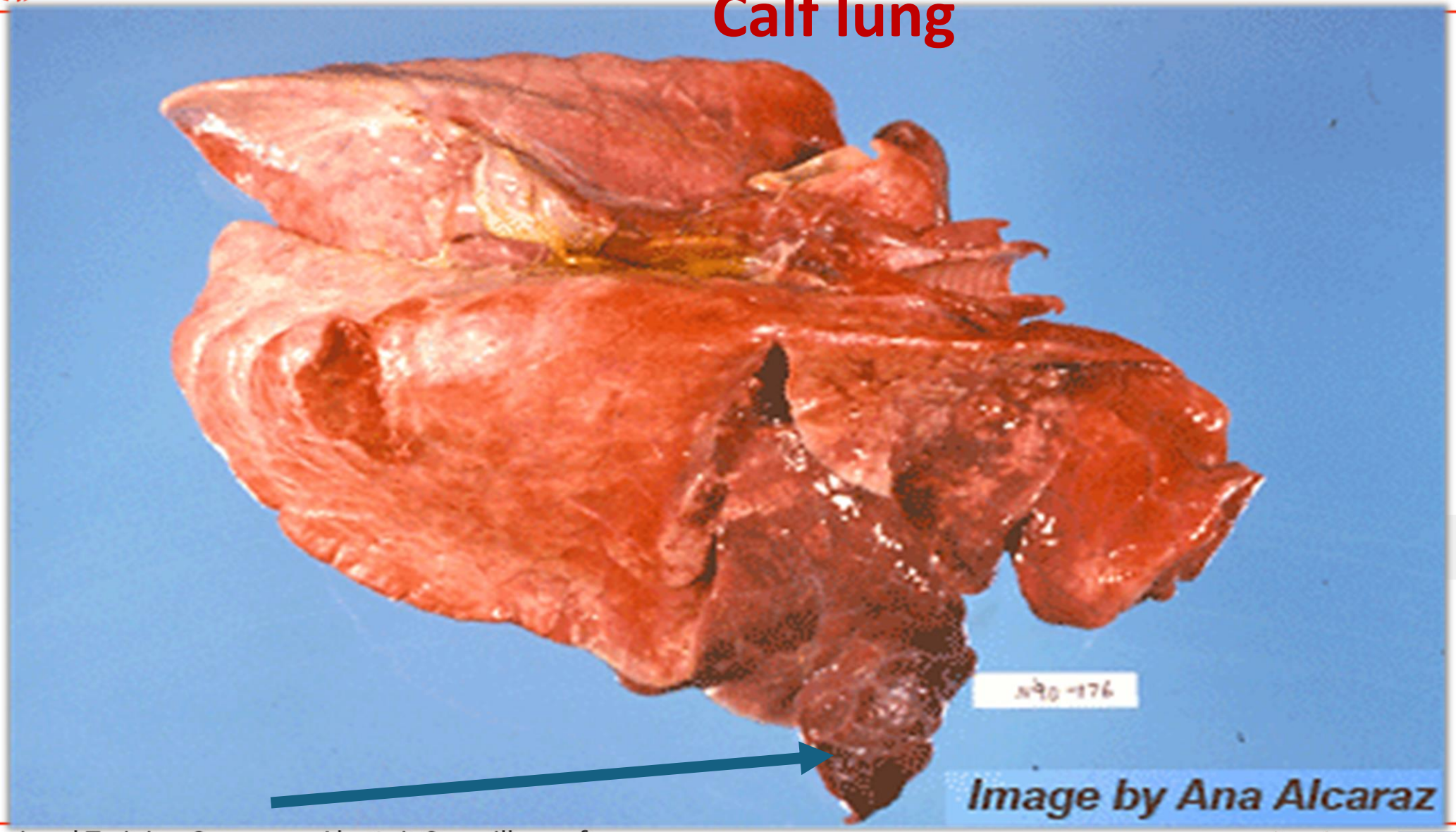


Calf lungs with congestion : Unknown

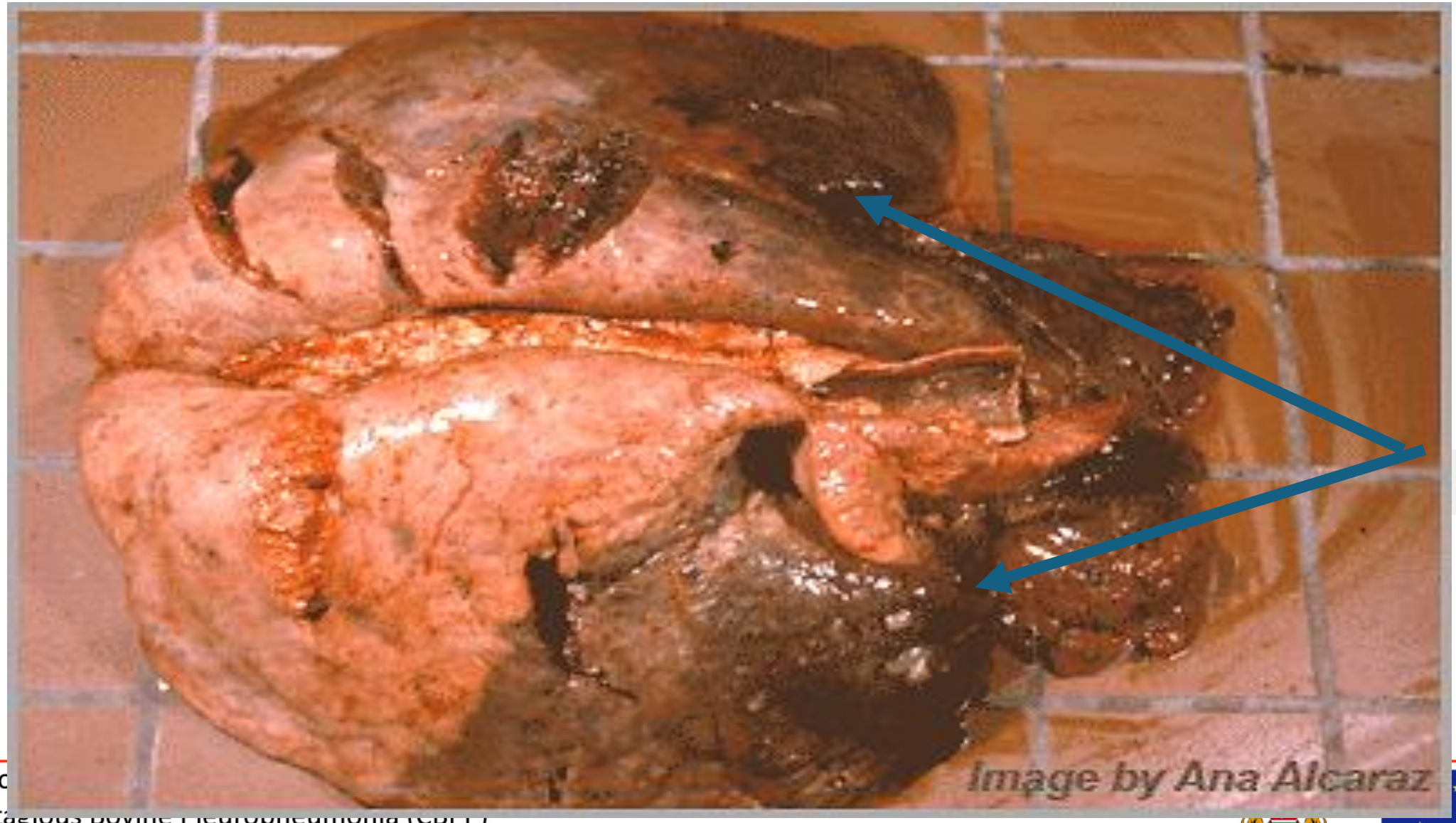


Calf lungs with congestion : Unknown

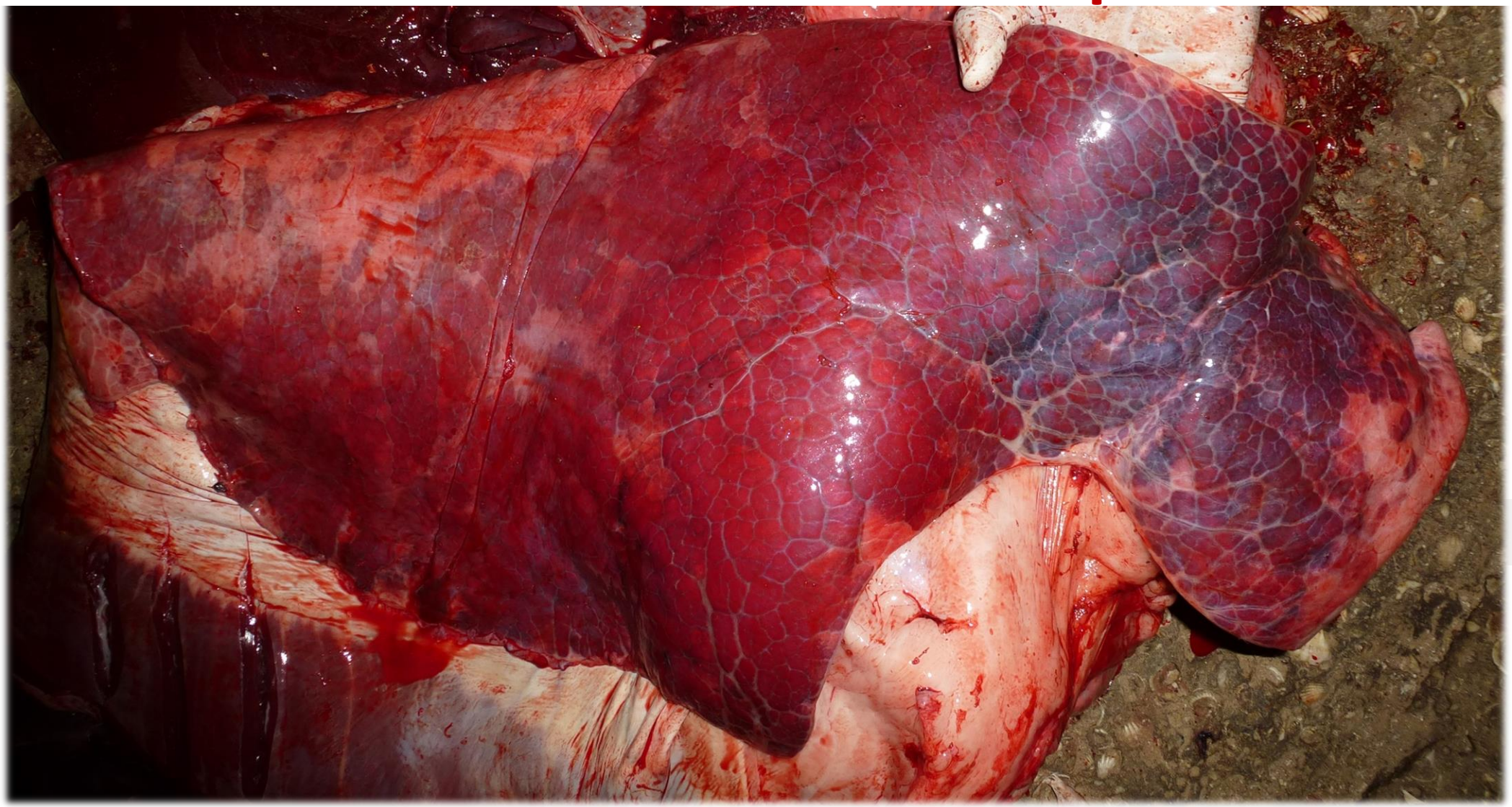
Congestion: Enzootic Pneumonia Calf lung



Congestion: Bilateral aspiration pneumonia post surgery



Monolateral blood aspiration

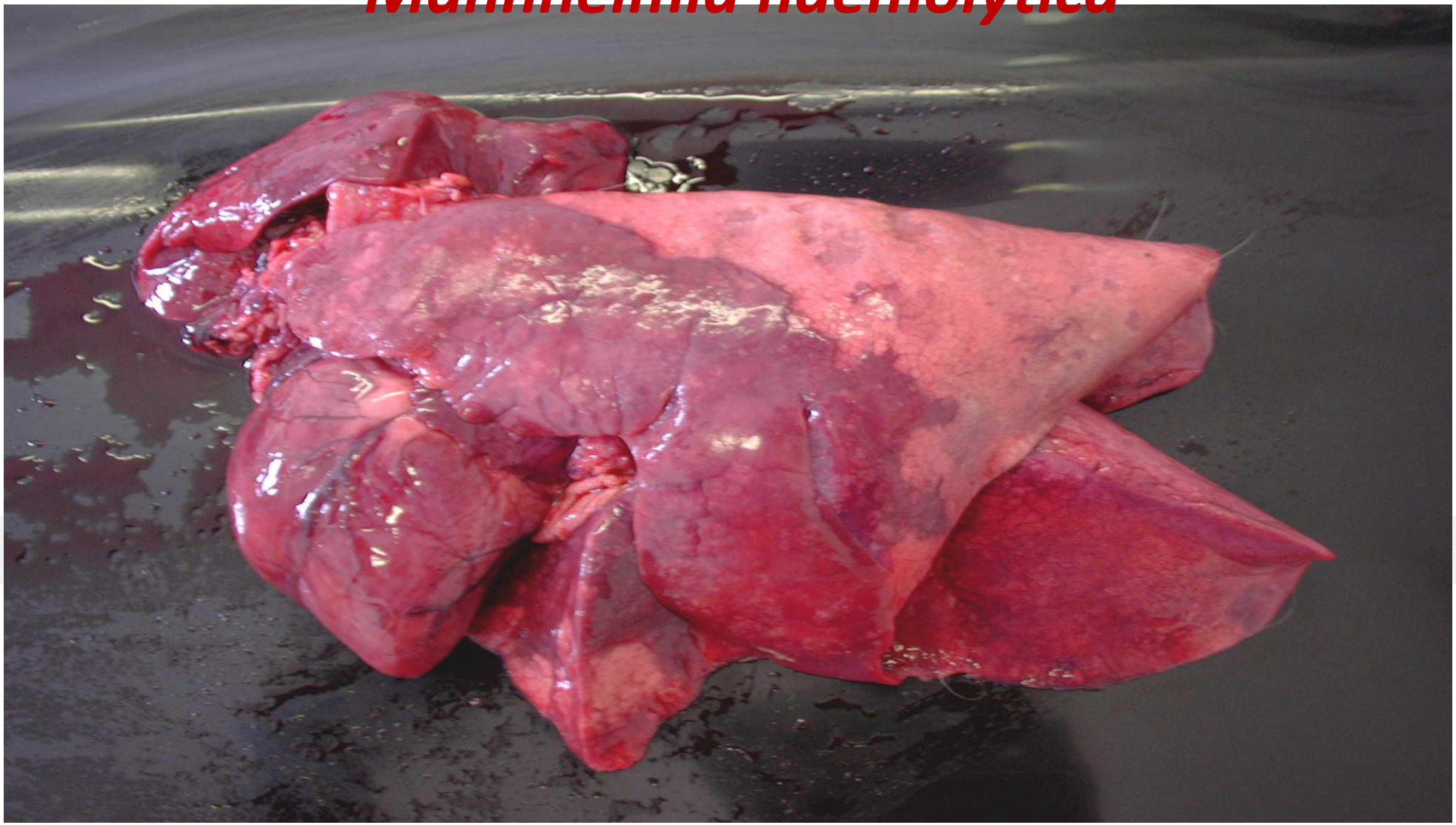


Blood aspiration

Consolidation

- Occurs when the lung tissue becomes dense and solid rather than spongy to touch
- Usually caused by invasion of the normally air filled aveolar spaces by either fluid, blood, pus or cells.
- The common cause of consolidation are; infectious pneumonia, pulmonary edema, pulmonary hemorrhage, aspiration, pulmonary infarction

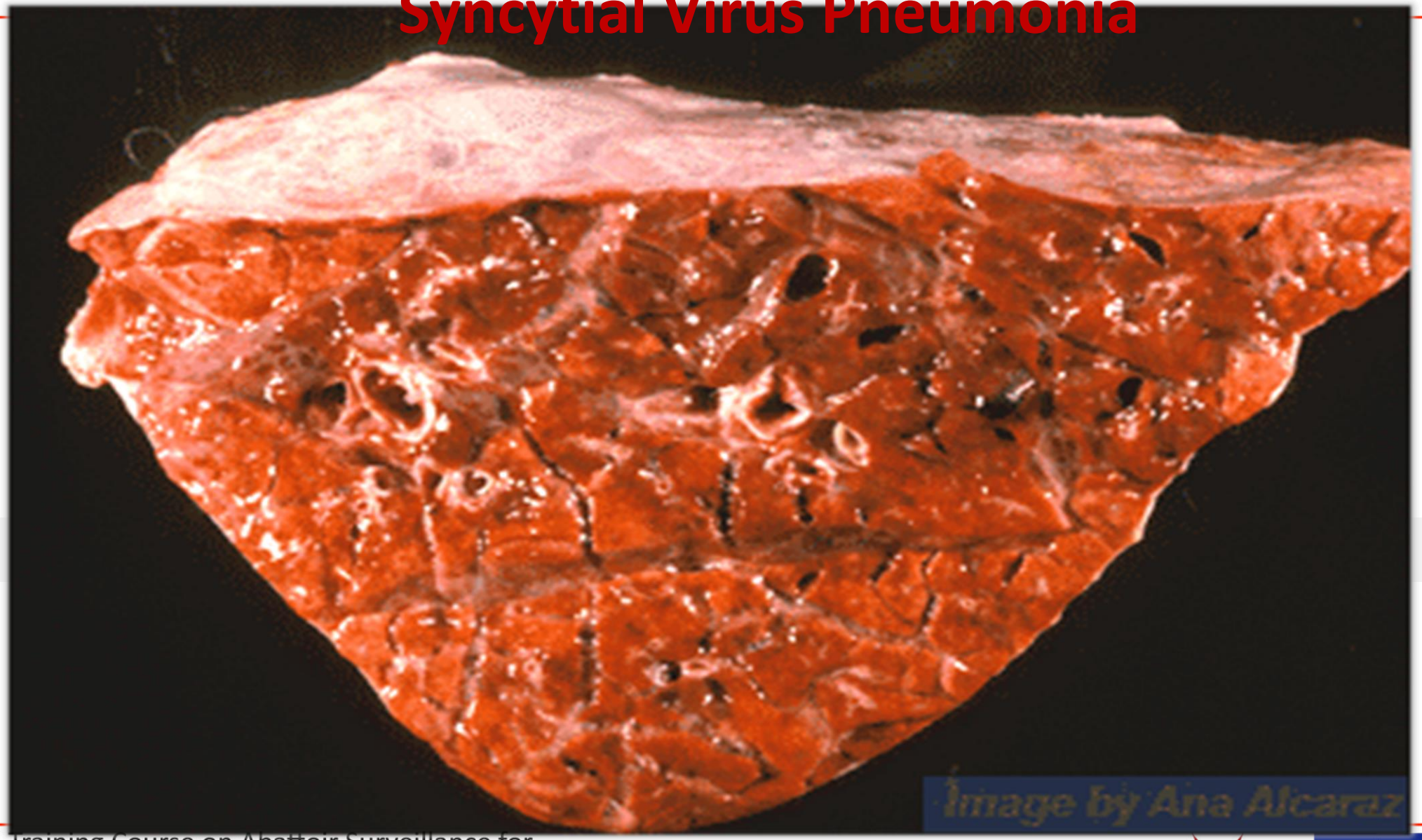
Consolidation: Pasteurellosis
Mannheimia haemolytica



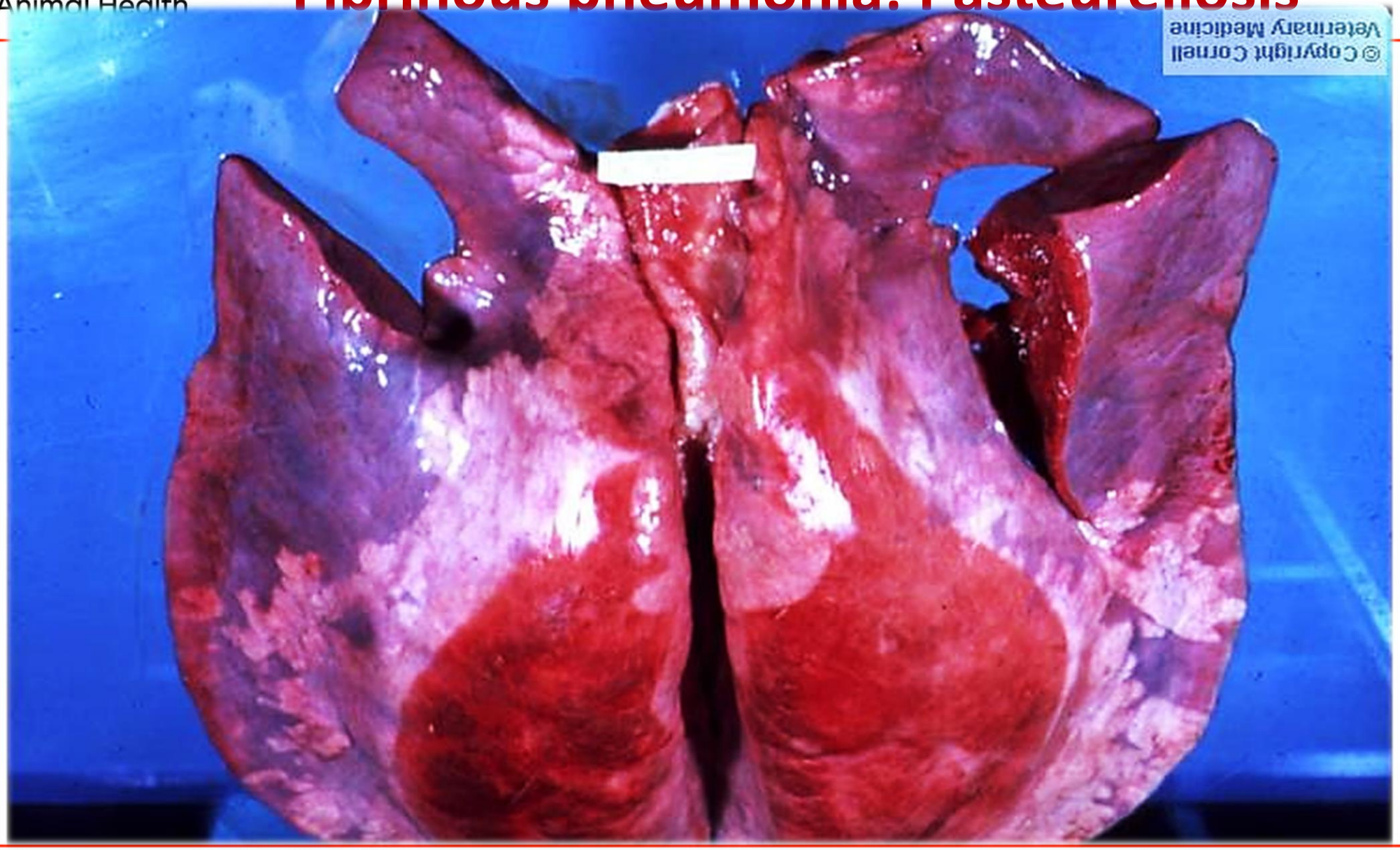
Consolidation: Enzootic Pneumonia

Consolidation: bacterial bronchopneumonia (*H. somnus*, *Mycoplasma* spp)

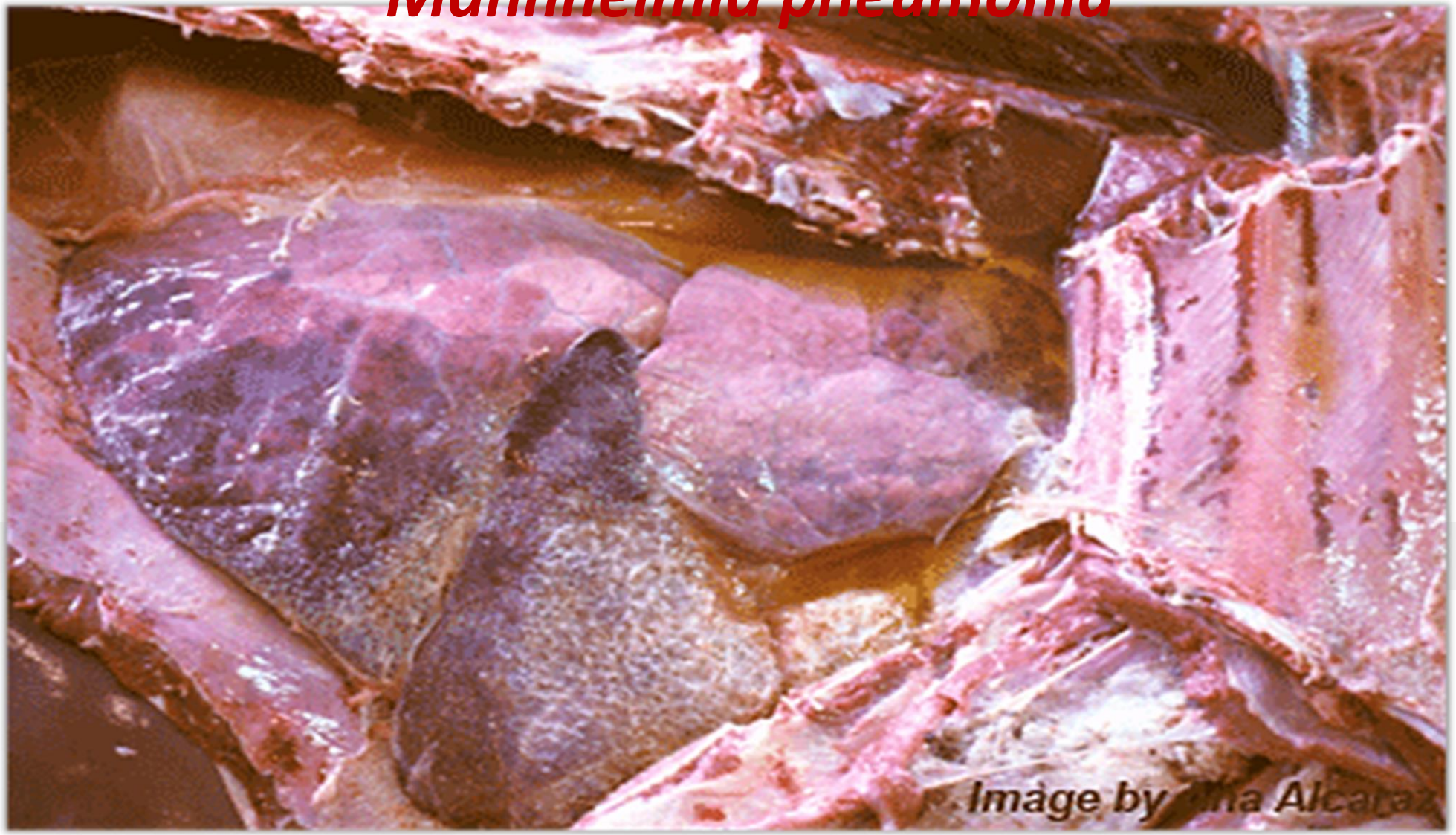
Air Infiltration: Bovine Respiratory Syncytial Virus Pneumonia



Fibrinous pneumonia: Pasteurellosis



Fibrinous pneumonia: Pasteurellosis
Mannheimia pneumonia

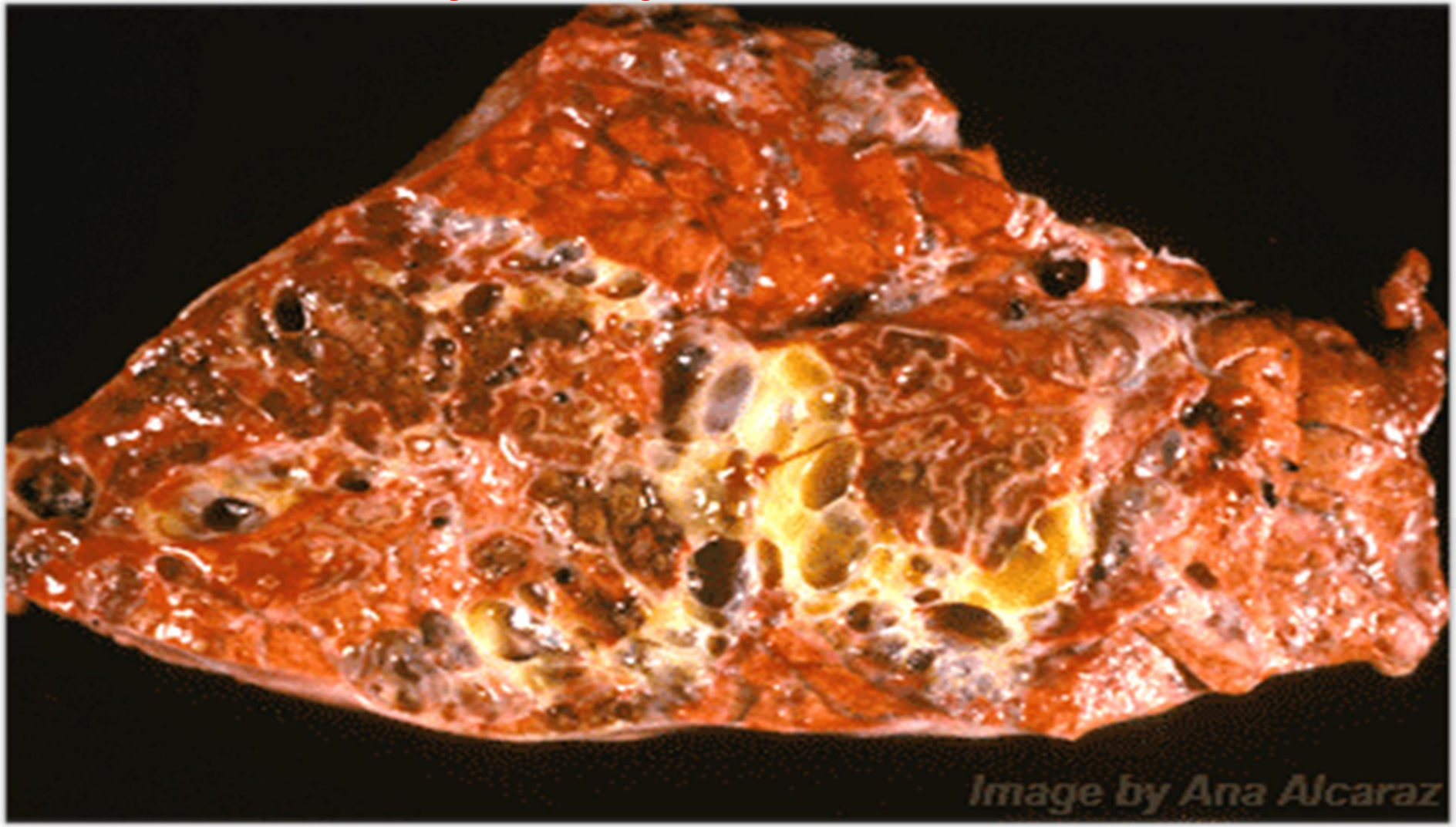


Contagious Bovine Pleuropneumonia (CBPP)

Fibrinous/necrotizing: Pasteurellosis
Mannheimia pneumonia

Fibrinous-necrotic pneumonia with septic thrombi

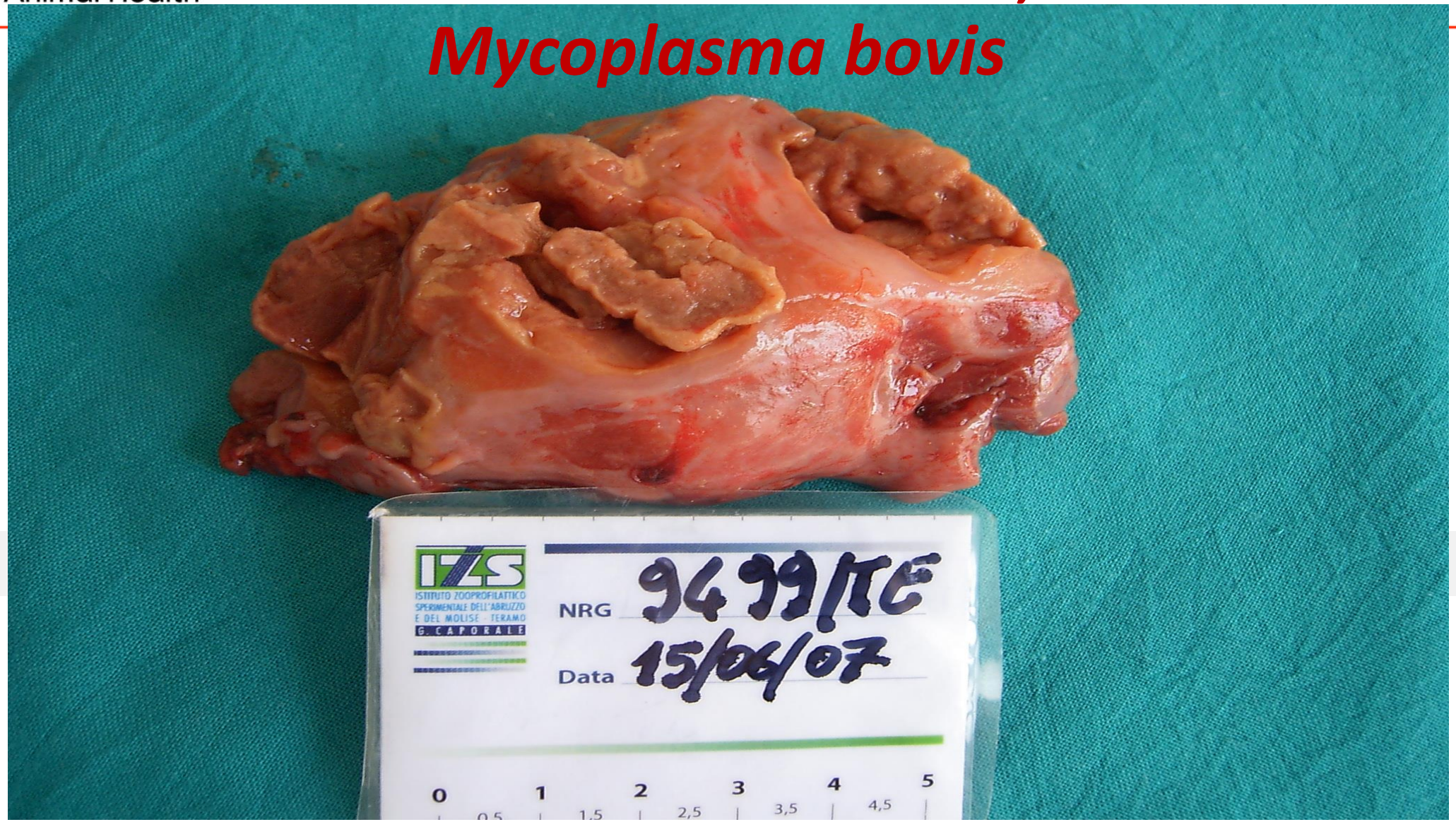
Granulomatous: Mycosis
Mycotic pneumonia



Necrotic caseous-calcific Pneumonia; TB

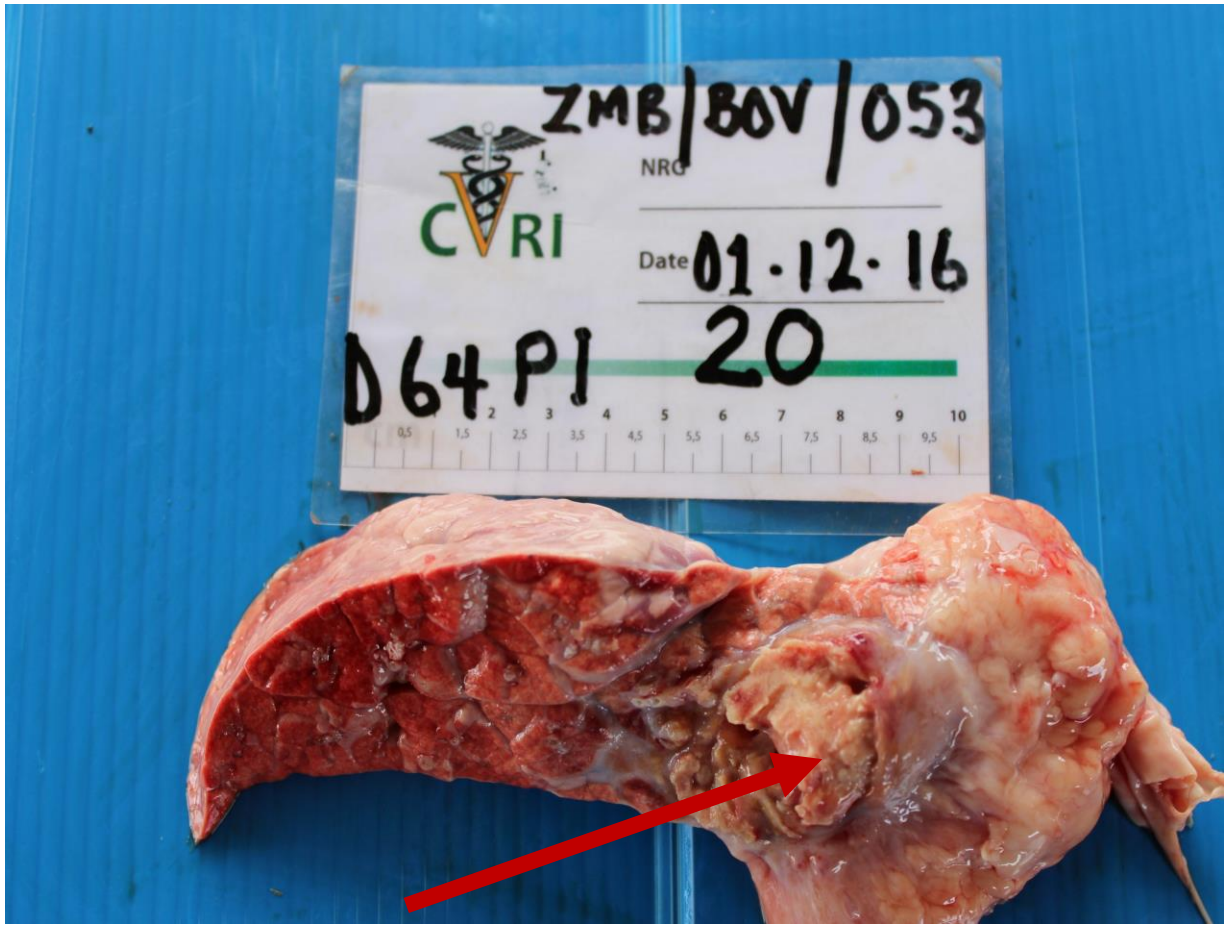
Necrotic Pneumonia;

Mycoplasma bovis



Echinococcus granulosus cysts

Sequestra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Thank you