

Clasificación de Neumonías

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**Centro Nacional de Servicios de Diagnóstico
en Salud Animal (CENASA)
Tecamac, Estado de México**



SECRETARÍA DE
AGRICULTURA, GANADERÍA,
DESARROLLO RURAL, PESCA Y ALIMENTACIÓN | SAGARPA

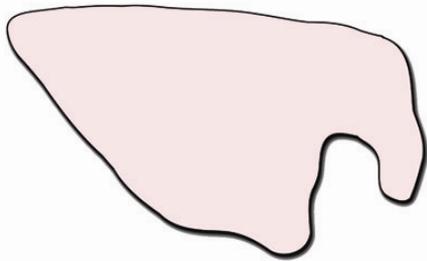


Clasificación Morfológica de Neumonías en Animales Domésticos

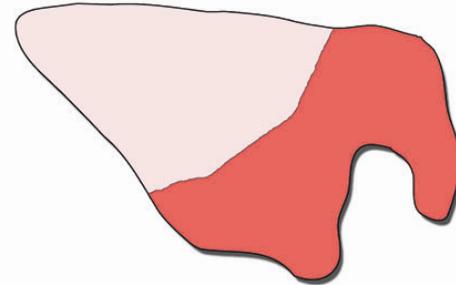
- Humanos vs Animales
- Etiología, Exudado, Epidemiología, Distribución, etc.
- Ninguna clasificación en animales es universal
- **En base a la te textura, apariencia y distribución del exudado en el pulmón:**

- 1. Bronconeumonía Supurativa**
- 2. Bronconeumonía Fibrinosa**
- 3. Neumonía Intersticial**
- 4. Neumonía Embólica**
- 5. Neumonía Granulomatosa**

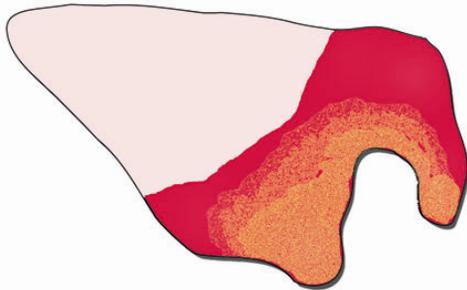
Distribución, Apariencia y Textura del Pulmón en los Diferentes Tipos de Neumonías de los Animales Domésticos



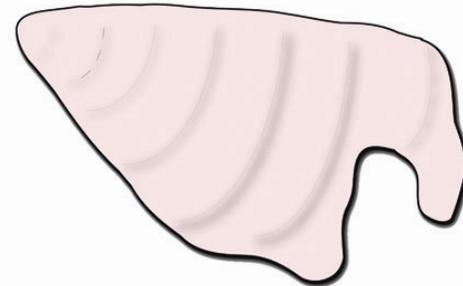
Normal



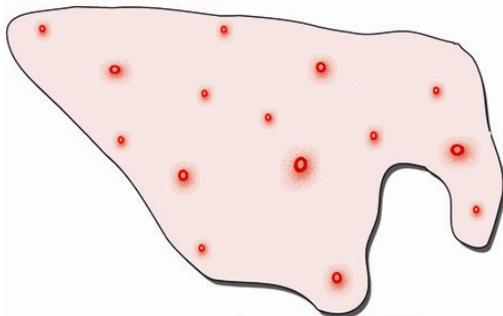
Bronconeumonía Supurativa



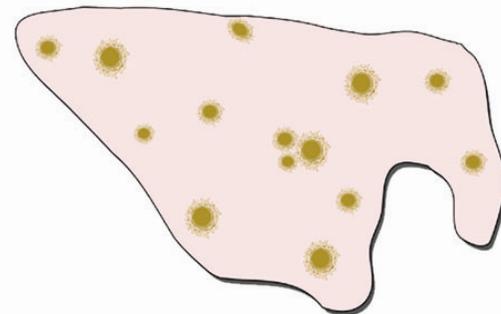
Bronconeumonía Fibrinosa



Neumonía Intersticial



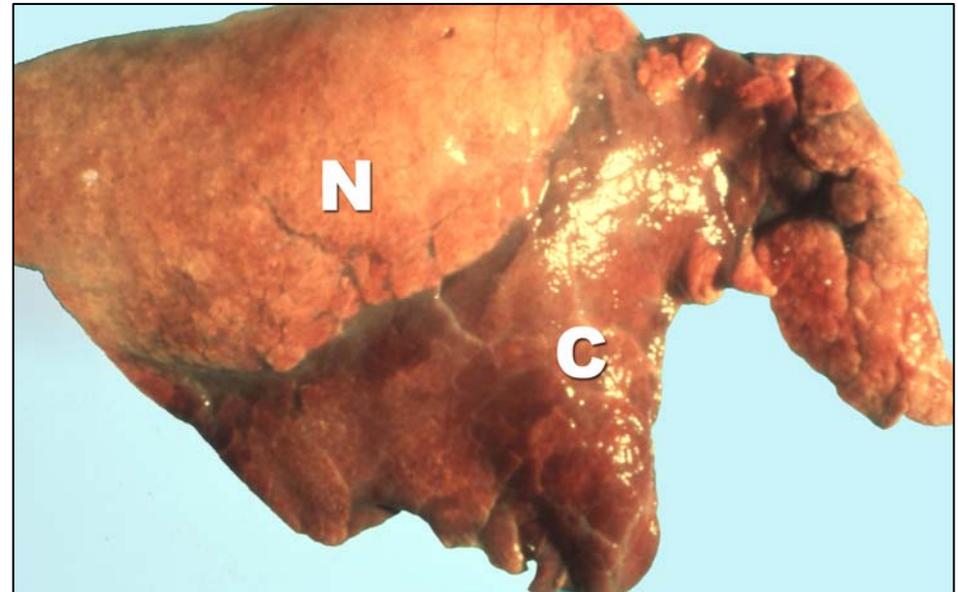
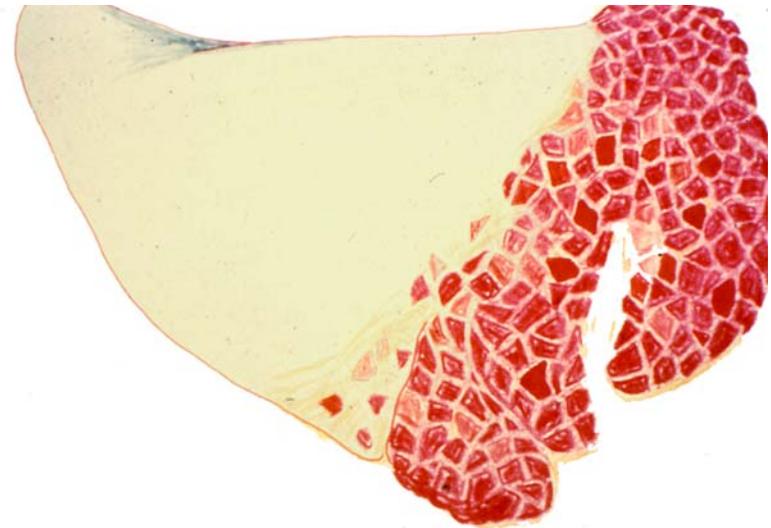
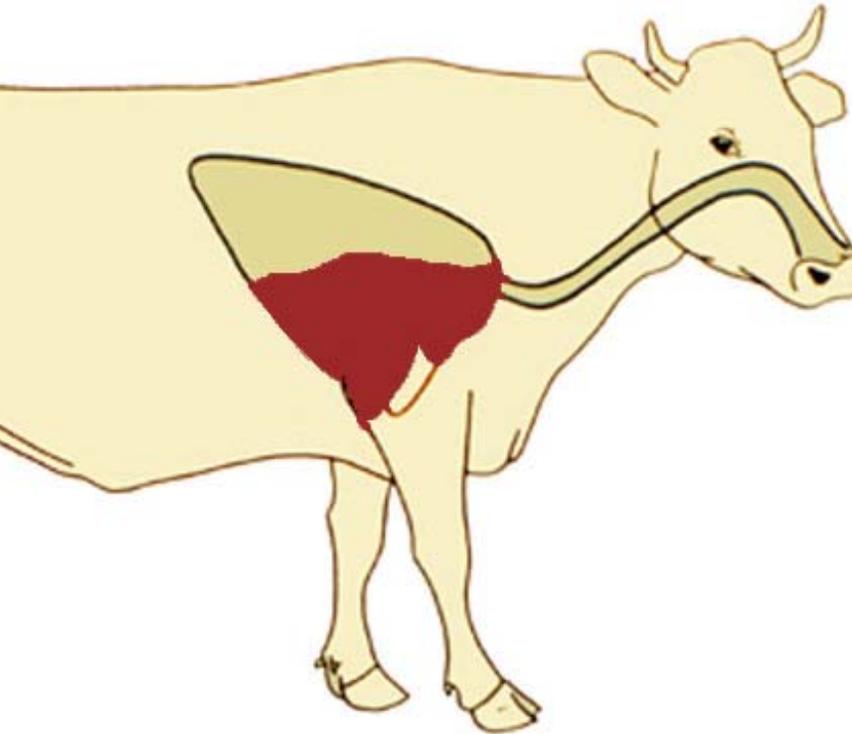
Neumonía Embólica



Neumonía Granulomatosa

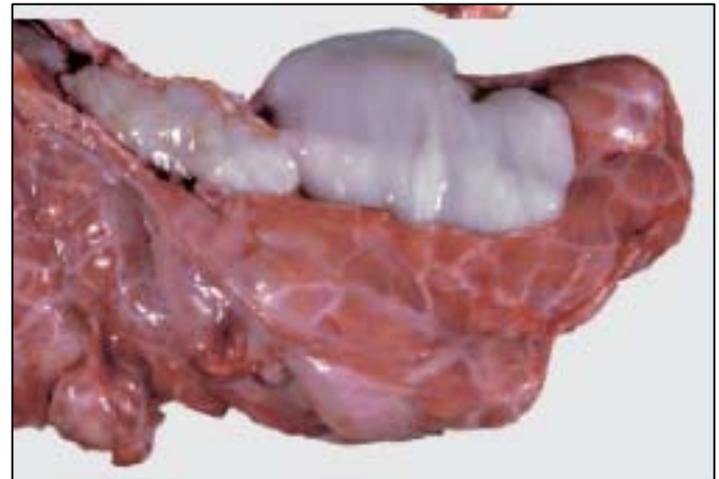
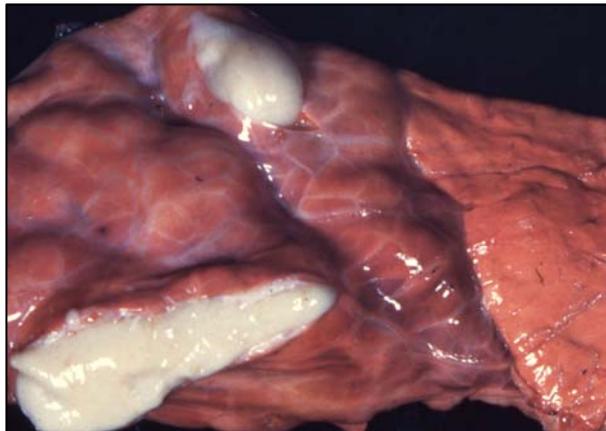
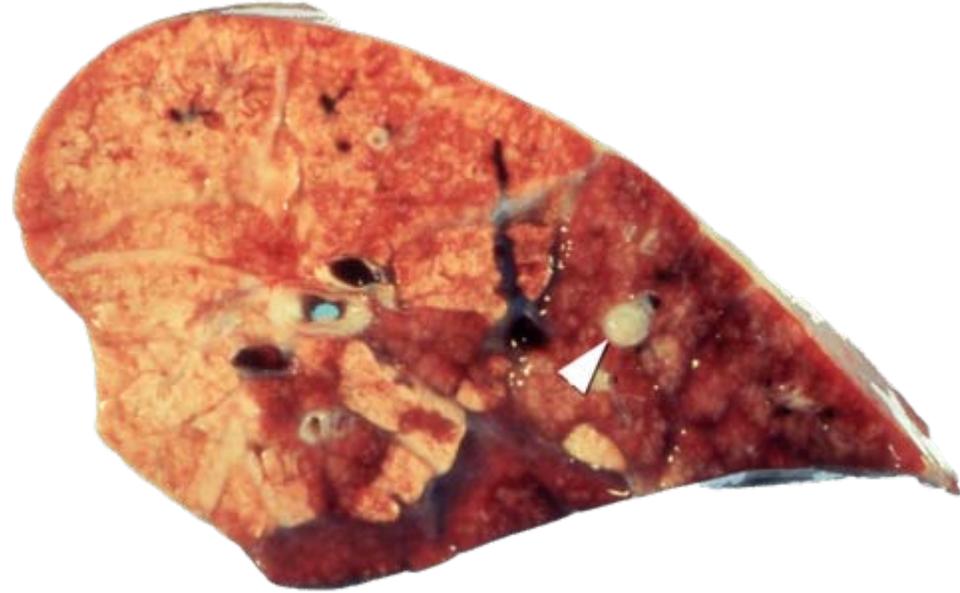
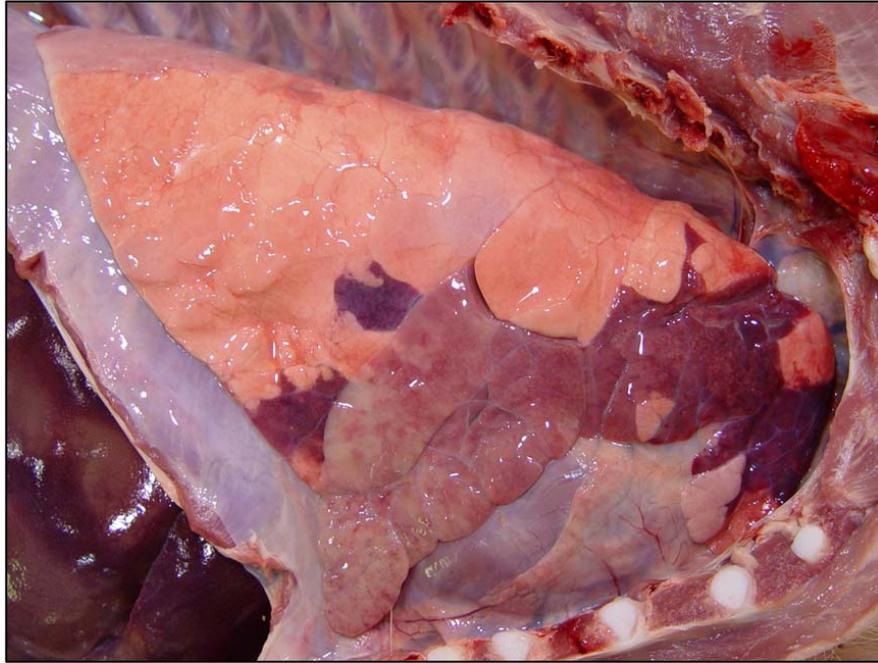
Bronconeumonía Supurativa

- Distribución cranioventral
- Textura Firme
- Puerta de entrada: Aerógena
- Bacterias y micoplasmas +++

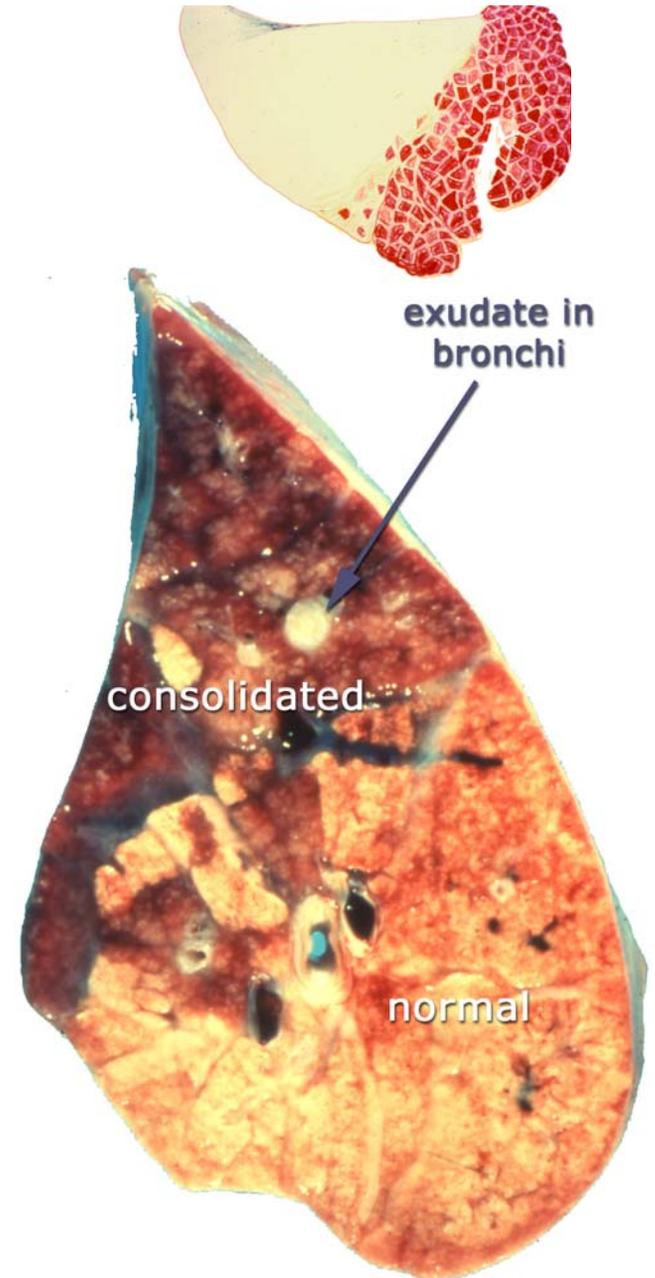
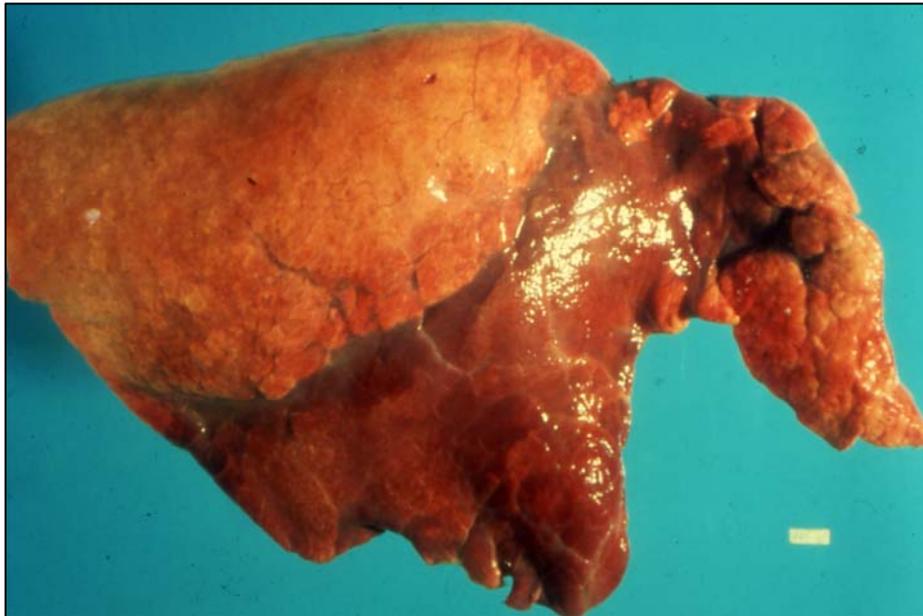
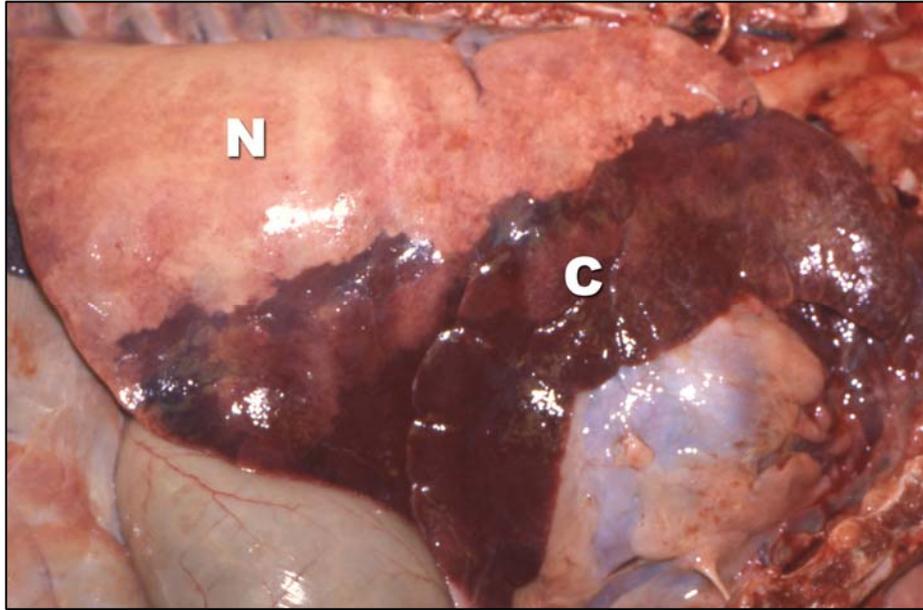


Bronconeumonía Supurativa

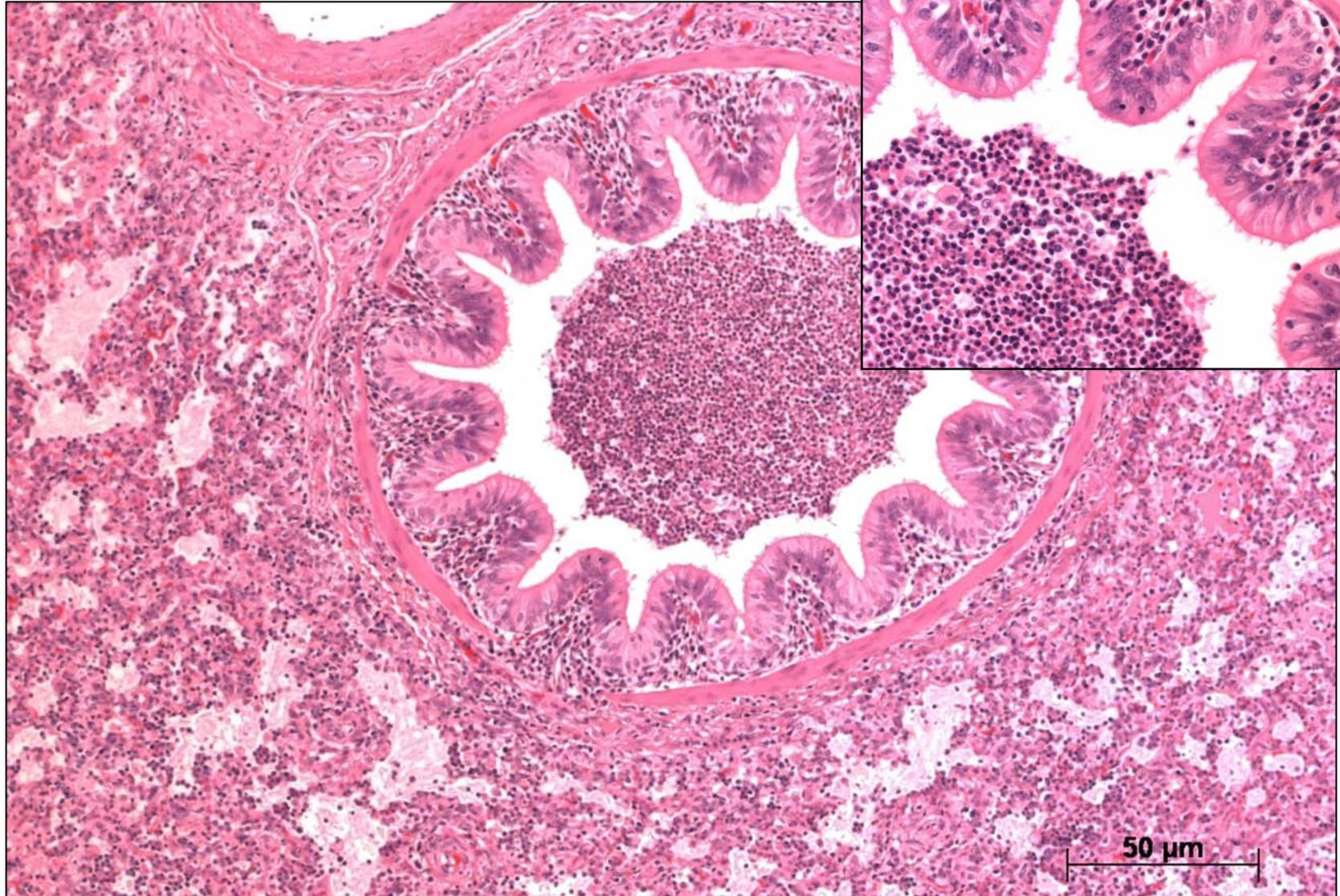
- Exudado purulento en bronquios al comprimir el pulmón (agudo)
- Exudado muco-purulento (crónico)



Bronconeumonía Supurativa

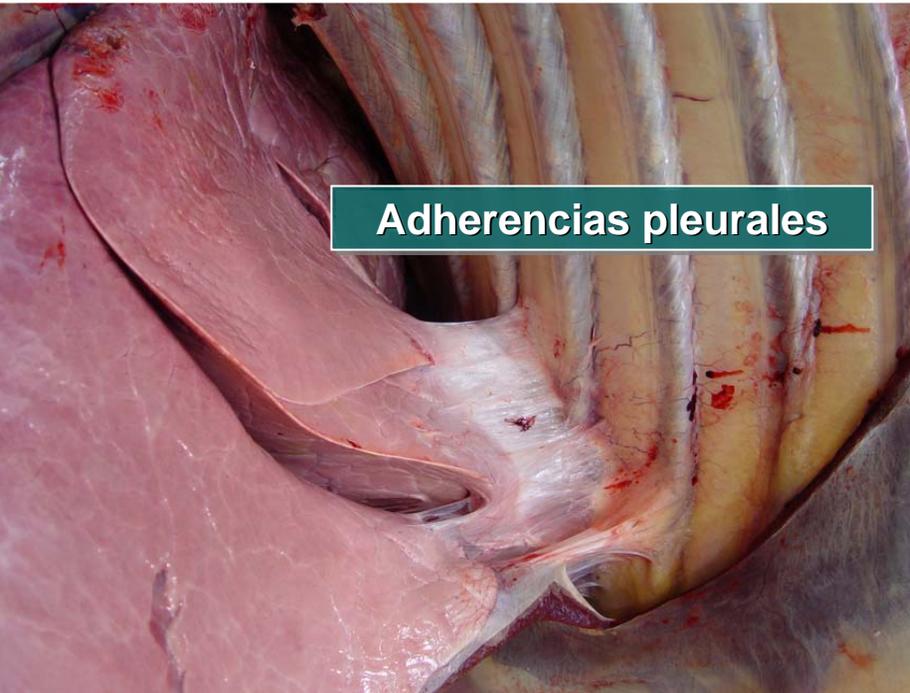
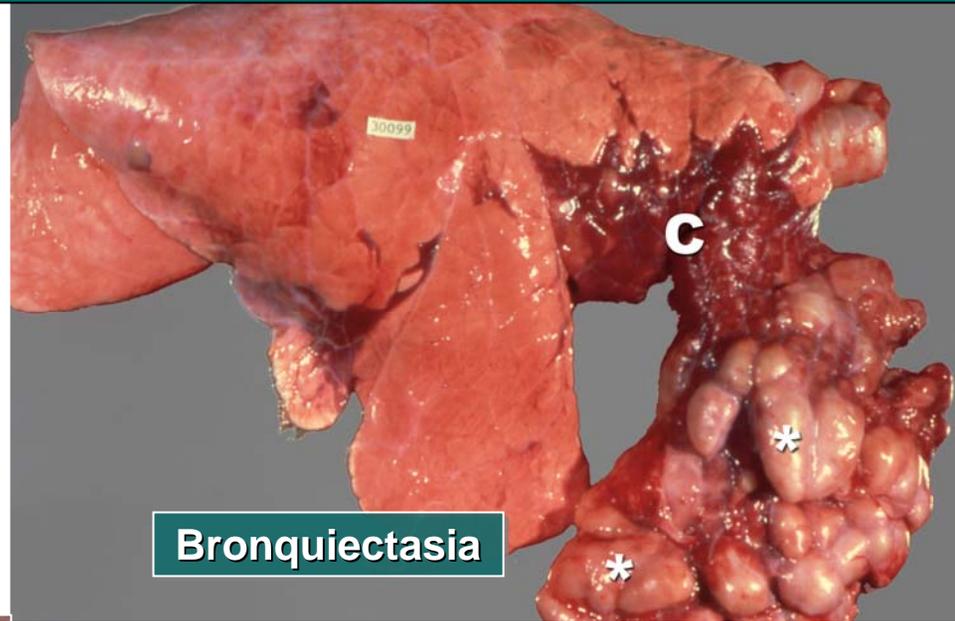


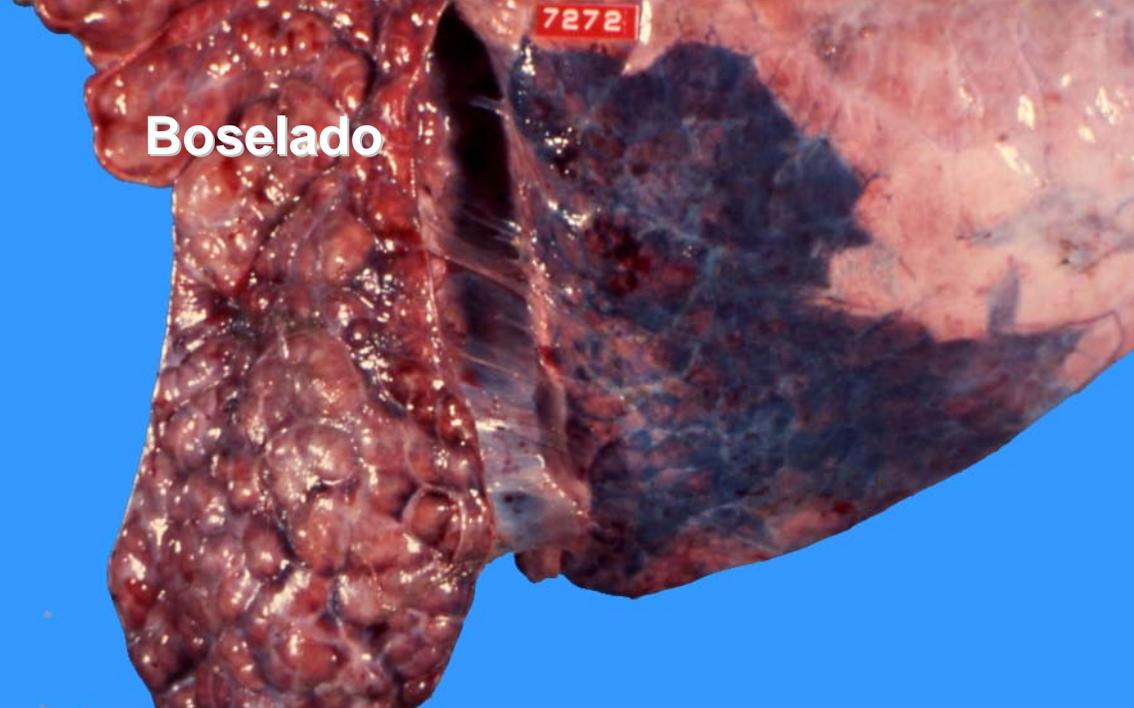
Apariencia Microscópica de la Bronconeumonía Supurativa (Aguda)



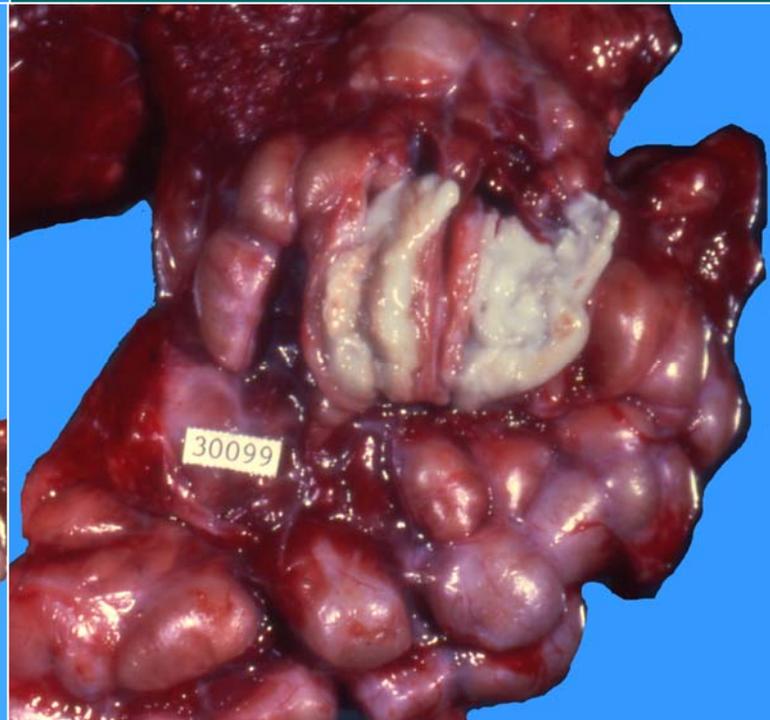
Secuelas Comunes de la Bronconeumonía Supurativa

- Bronquiectasia
- Abscesos
- Adherencias



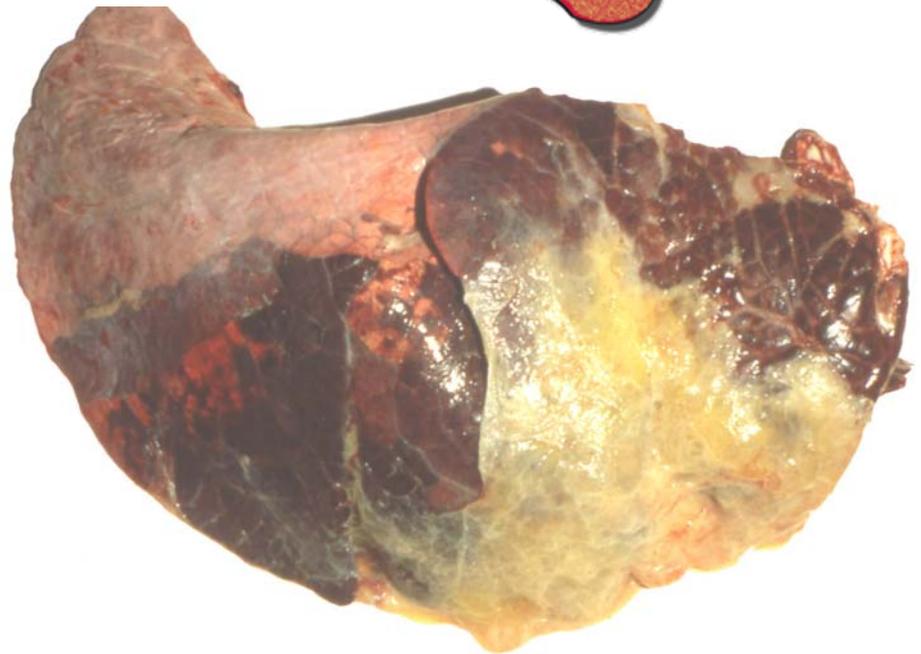
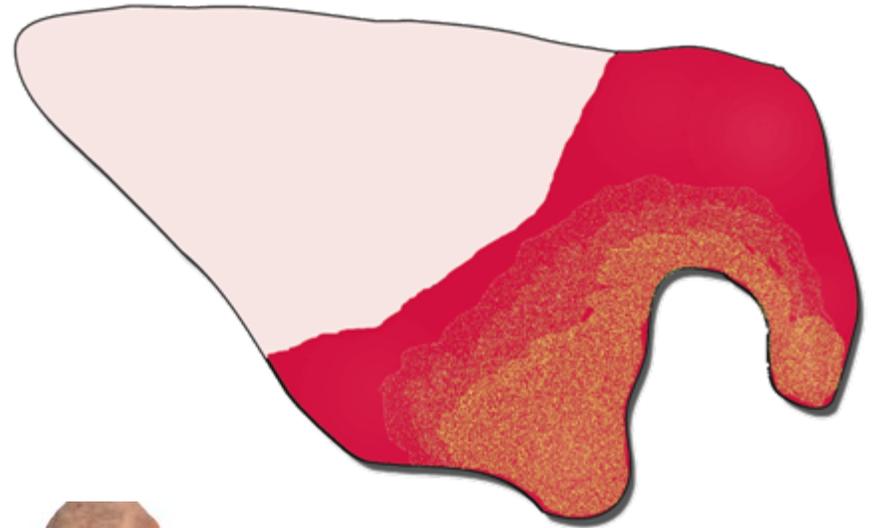
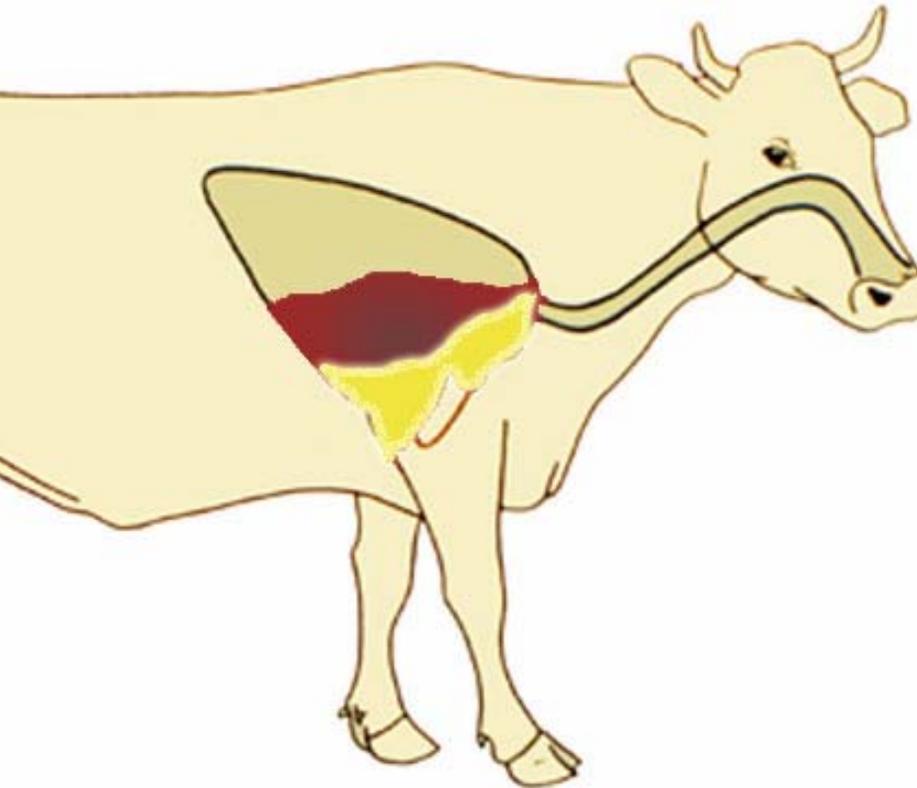


Bronquiectasia

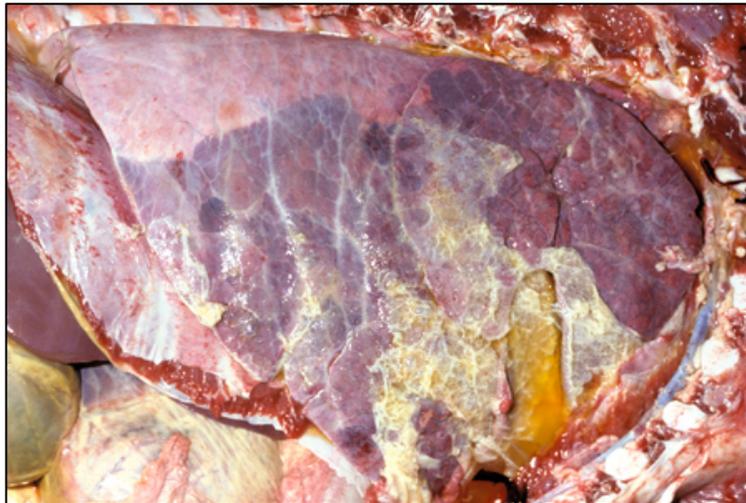
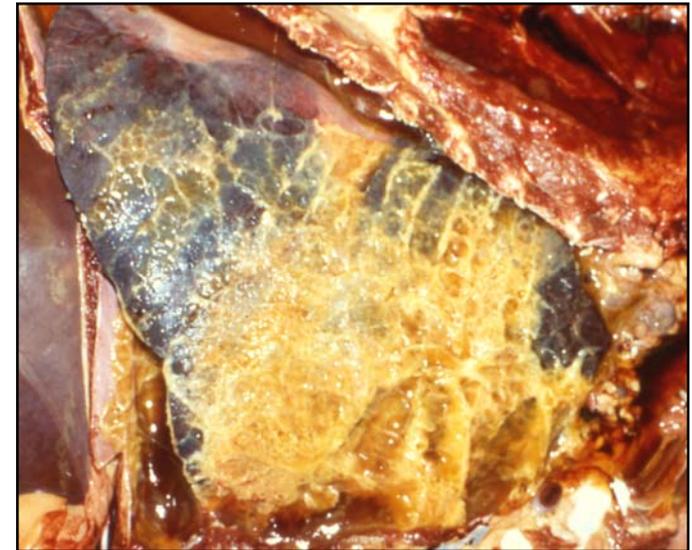
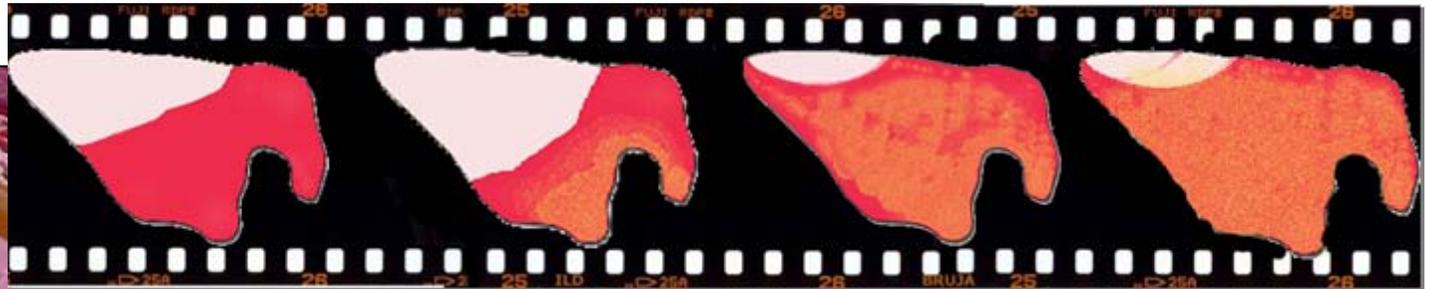
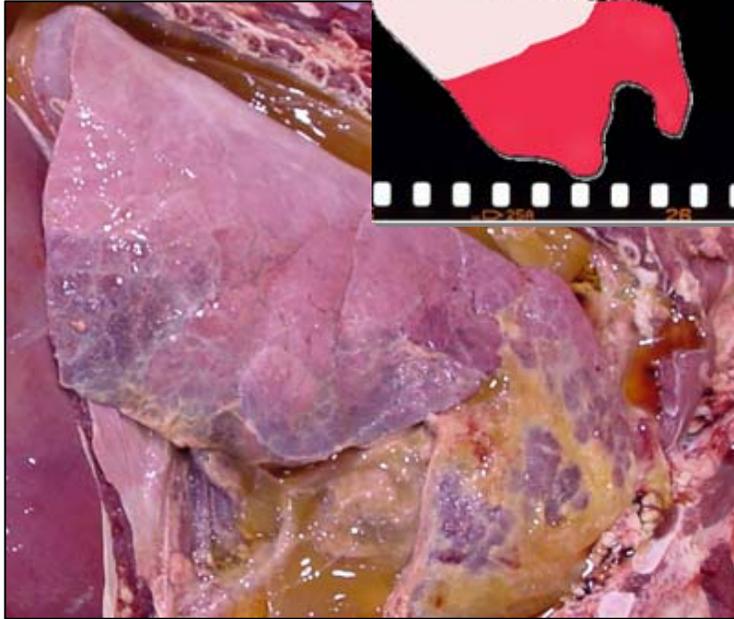


BRONCONEUMONIA FIBRINOSA

- Distribución Cranioventral §
- Textura dura
- Fibrina en pleura
- Puerta de entrada aerógena
- Bacteria con toxinas



Bronconeumonía Fibrinosa



Bronconeumonía Fibrinosa

Bacterias con alta patogenicidad / Neumonía por Aspiración

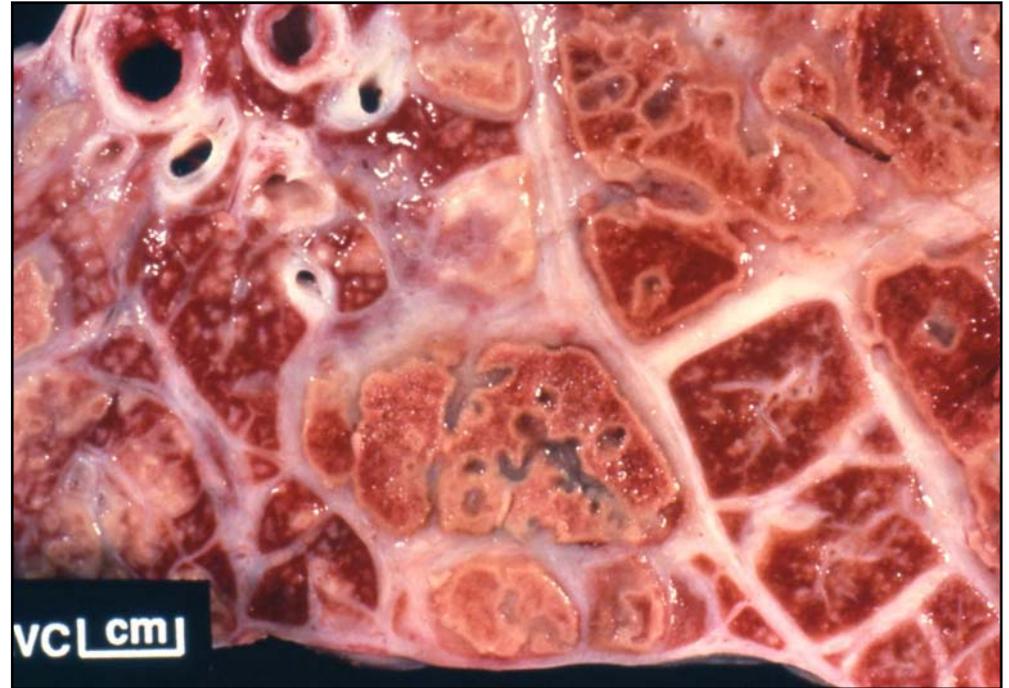


Bronconeumonía Fibrinosa



Bronconeumonía Fibrinosa (superficie de corte)

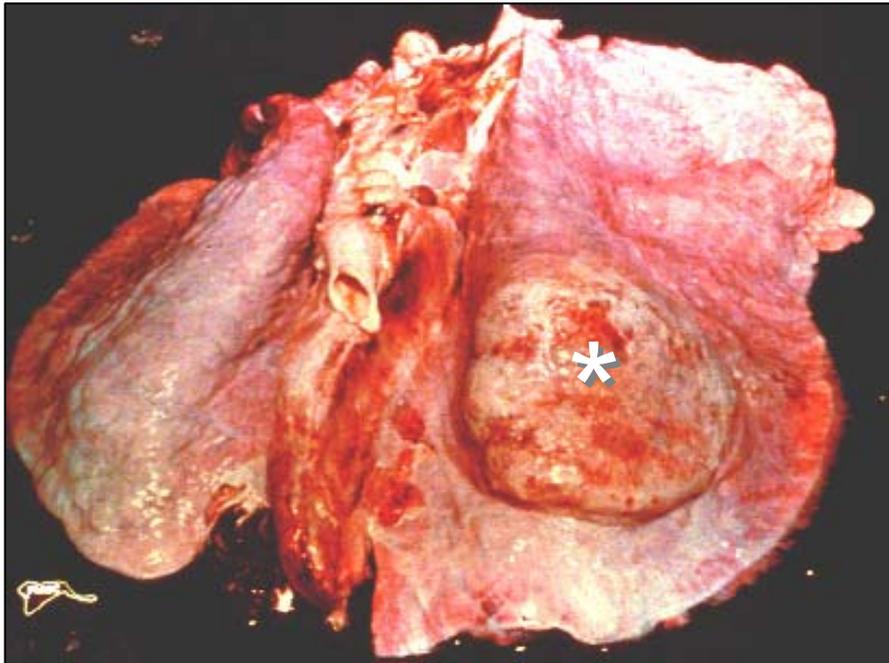
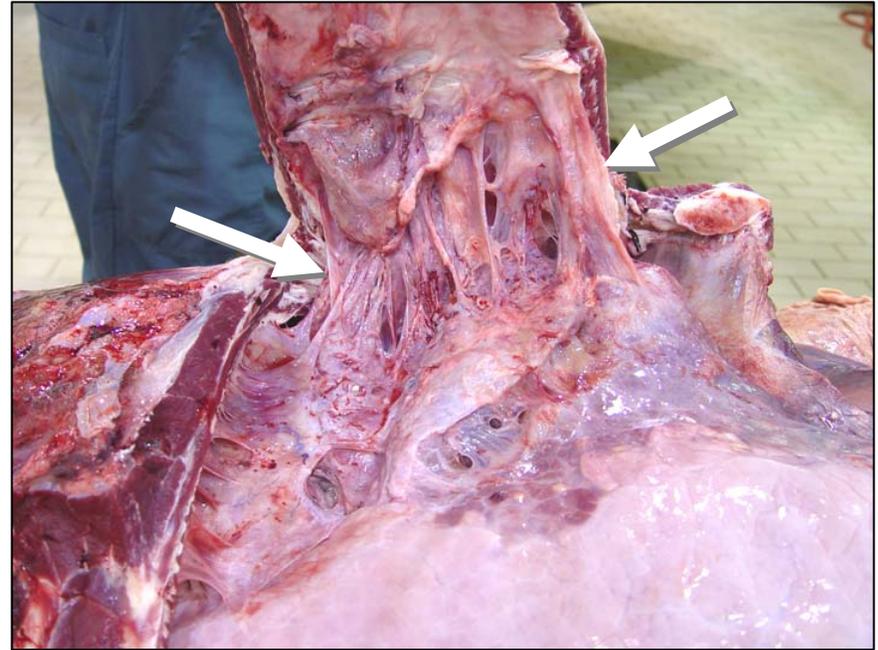
- Distensión de septos interlobulares
- Trombosis Linfática
- Áreas de necrosis coagulativa



Secuelas

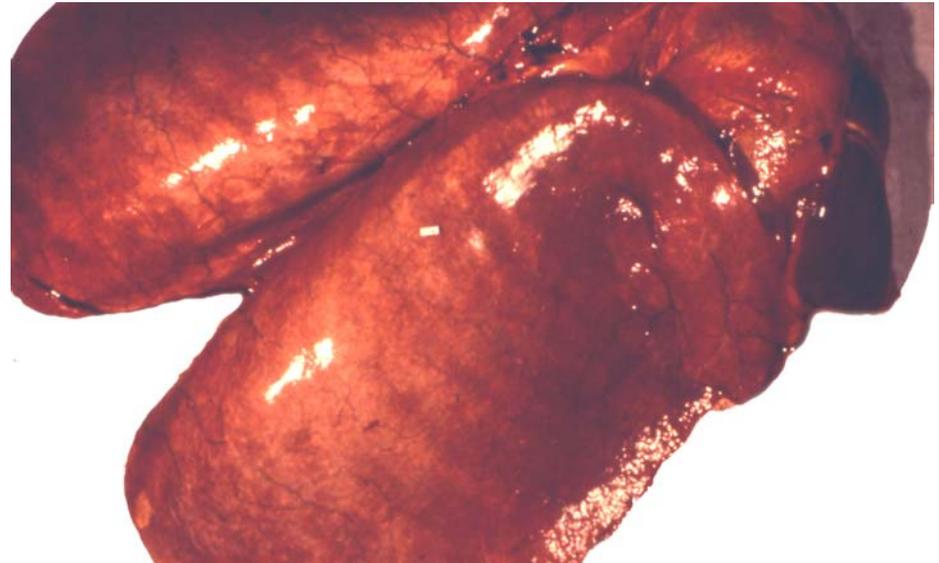
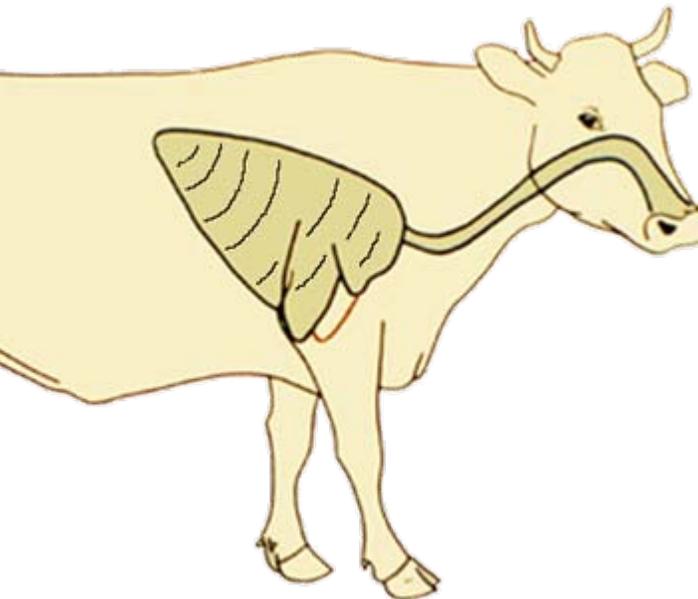
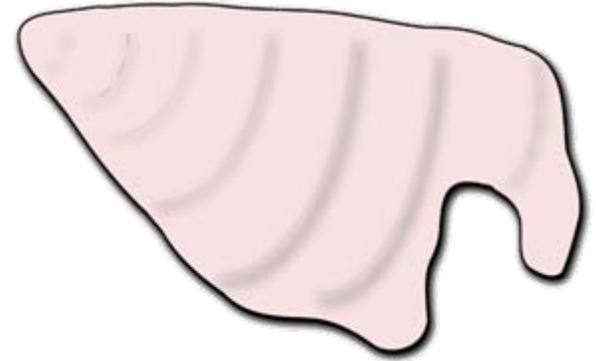
Bronconeumonía Fibrinosa

- Adherencias pleurales (flechas)
- Secuestro pulmonar (*)
- Abscesos



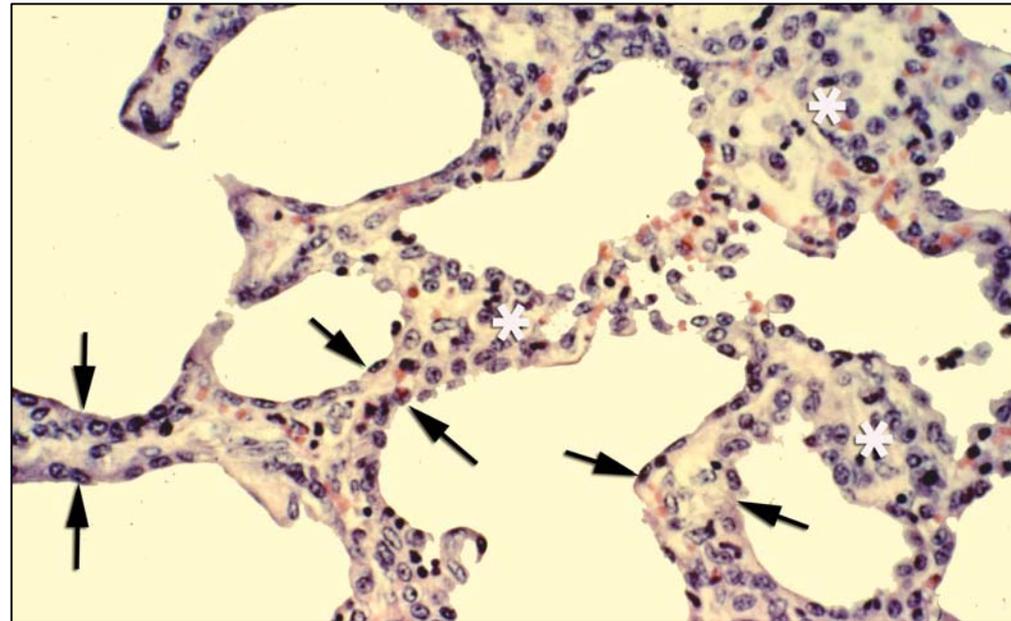
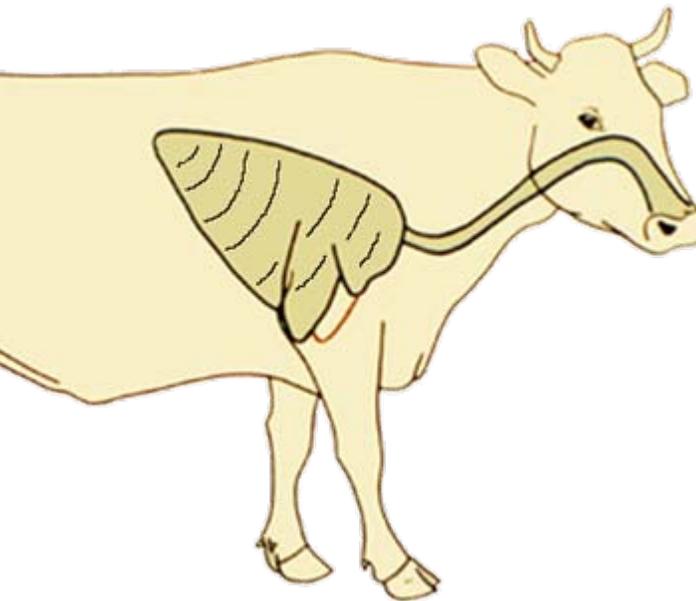
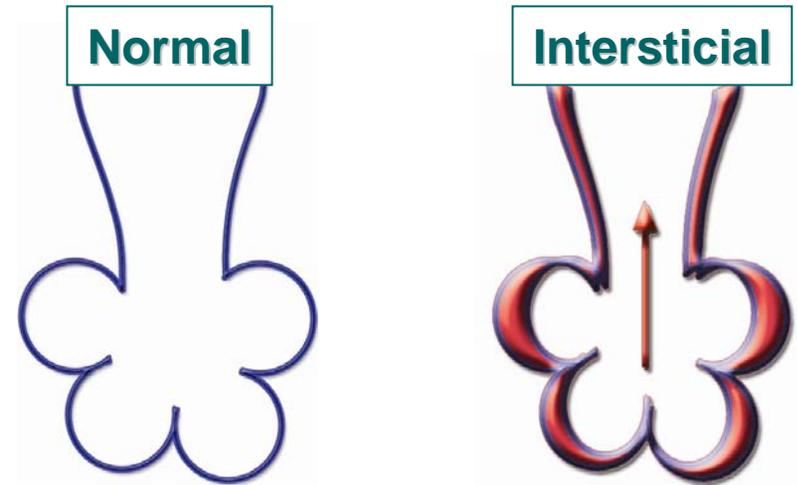
Neumonía Intersticial (Neumonitis)

- El pulmón no colapsa al abrir el tórax
- Distribución difusa
- Marcas costales
- Textura elástica
- Superficie de corte carnososa
- Puerta de entrada:
 - Aerógena
 - Hematógena



Patogénesis de la Neumonía Intersticial

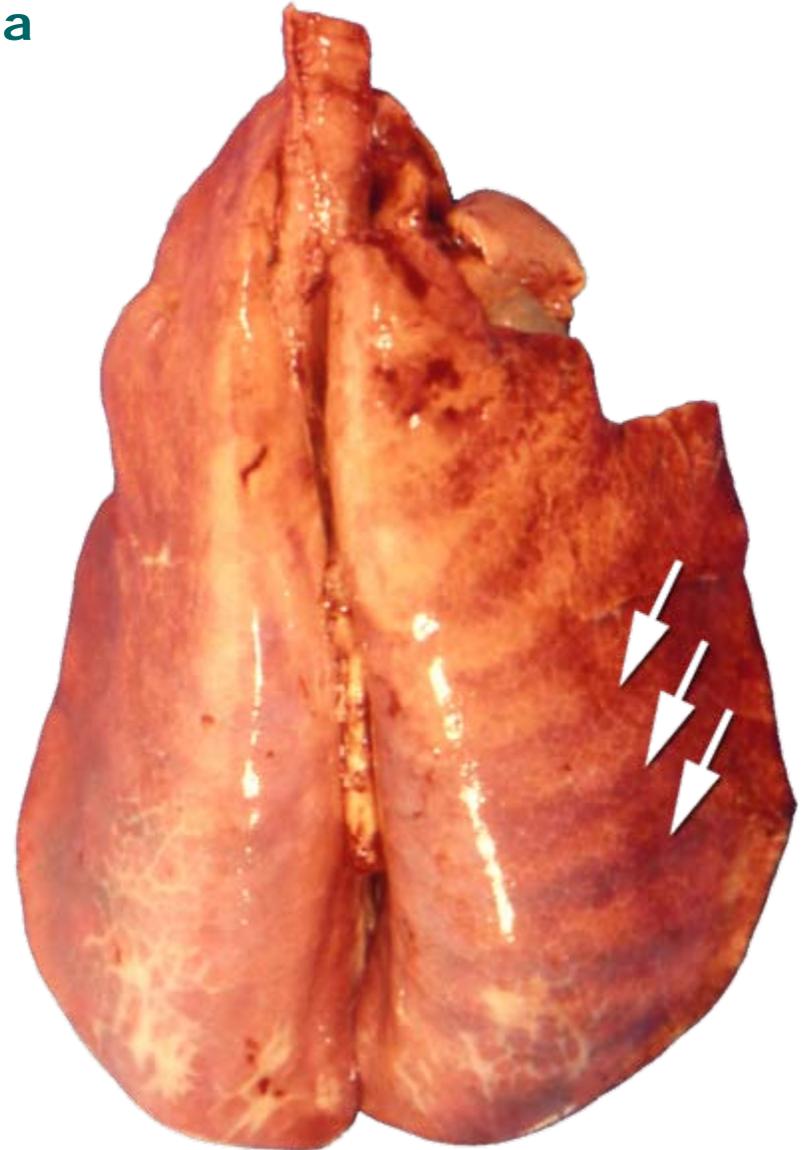
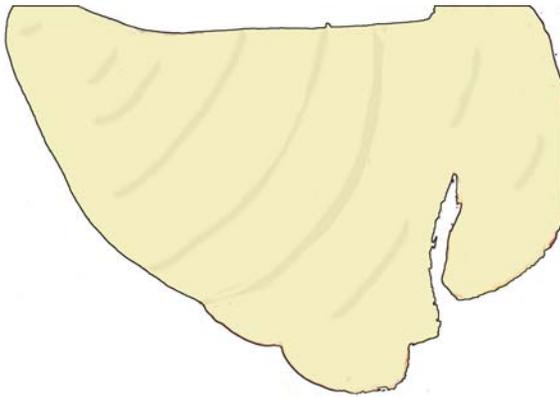
- **Etiologías:** Virus, sepsis, agentes químicos, hipersensibilidad, gases tóxicos
- **Lesiones:** centradas en el intersticio
- **Daño:** Neumocitos o endotelio



Neumonía Intersticial (Lesiones Macroscópicas)

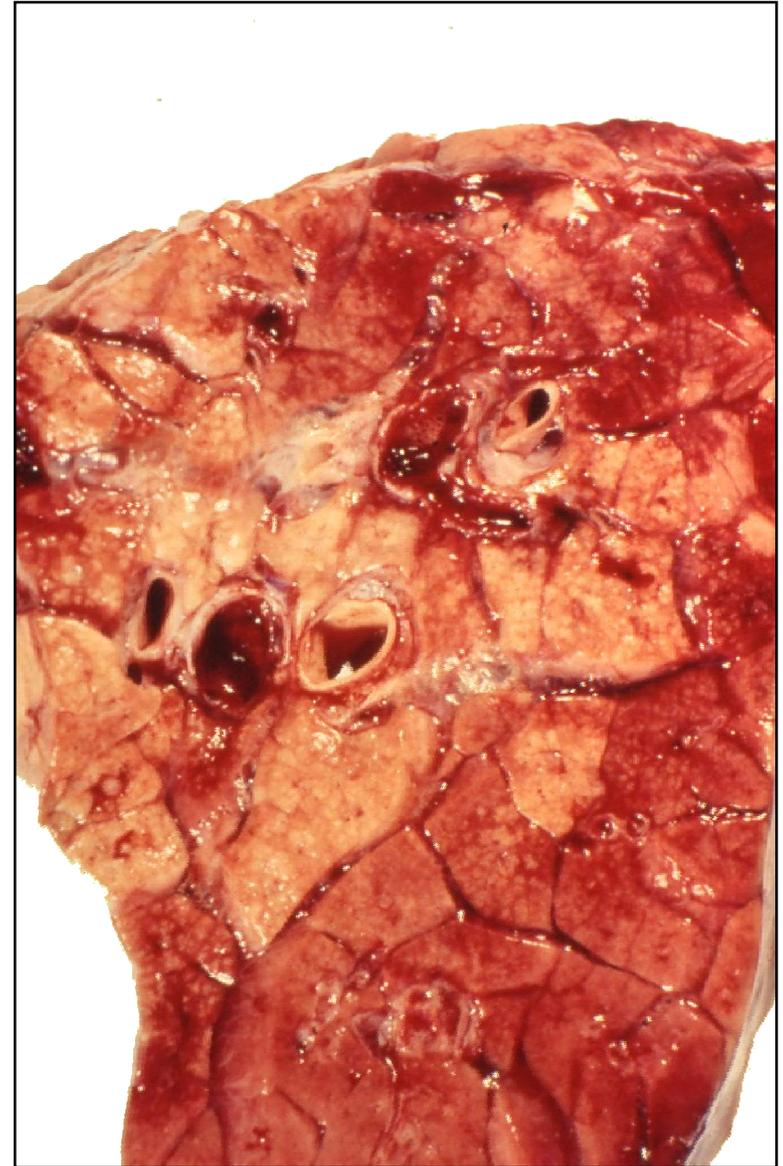
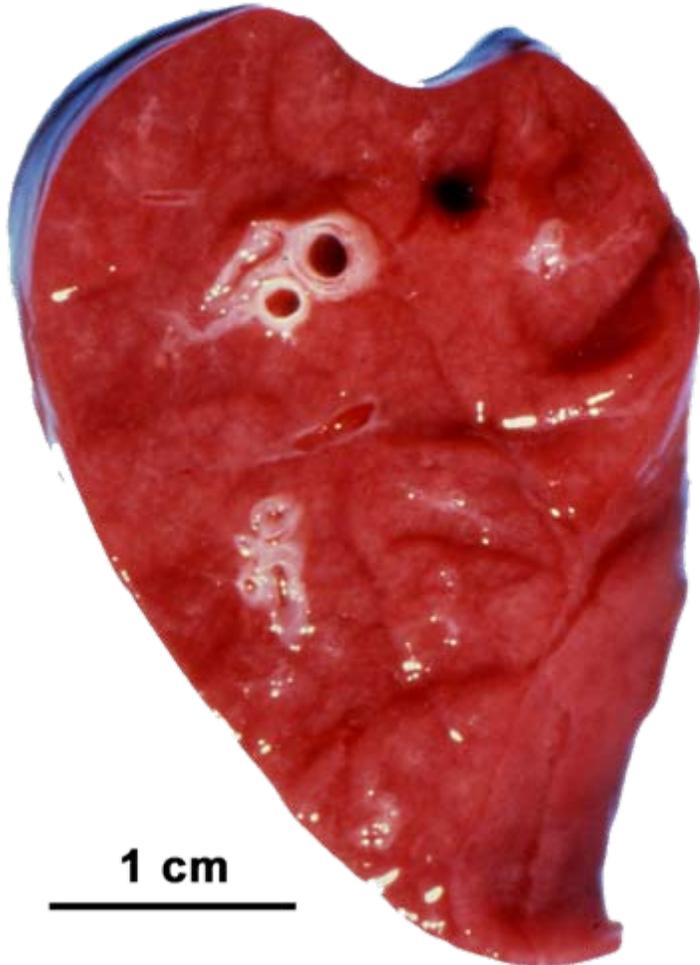
- Difícil de diagnosticar a la necropsia

- Virus
- Toxinas
- Sepsis
- Hipersensibilidad

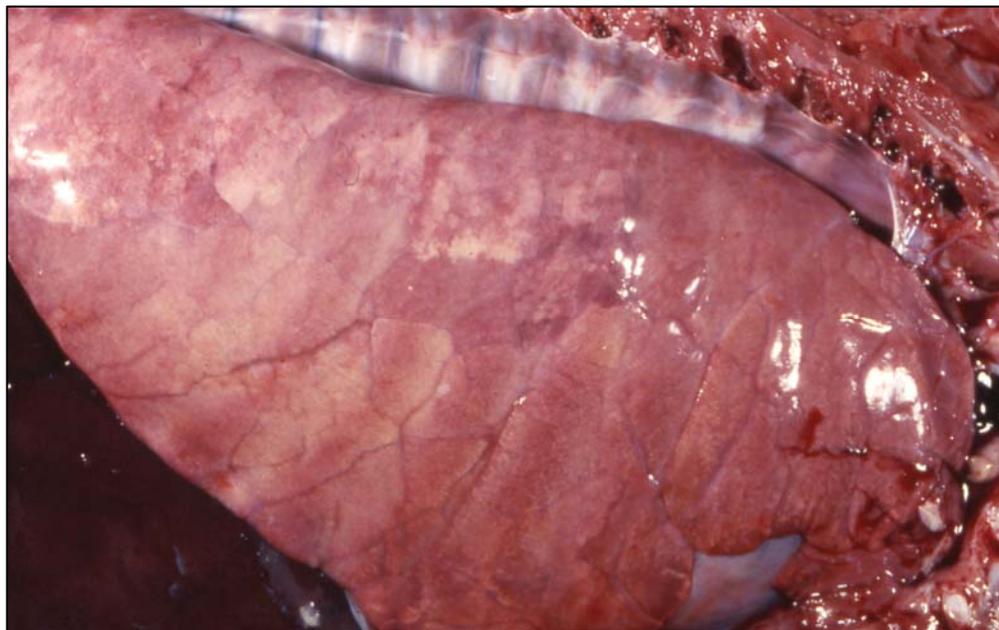


Neumonía Intersticial (Superficie de Corte)

- Apariencia carnosa
- Generalmente hay edema

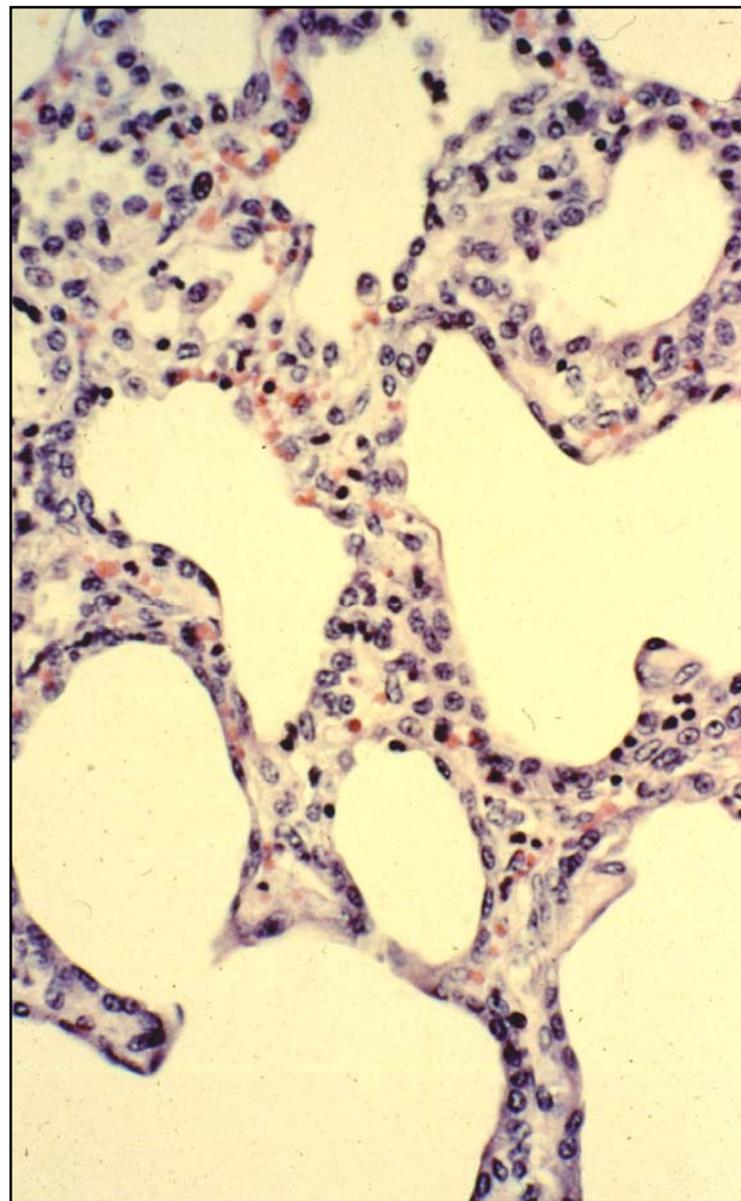


Neumonía Intersticial



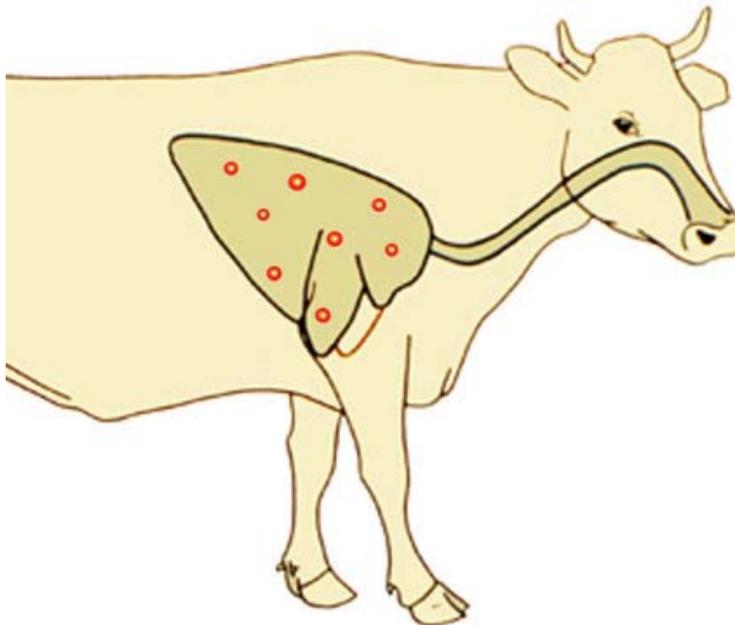
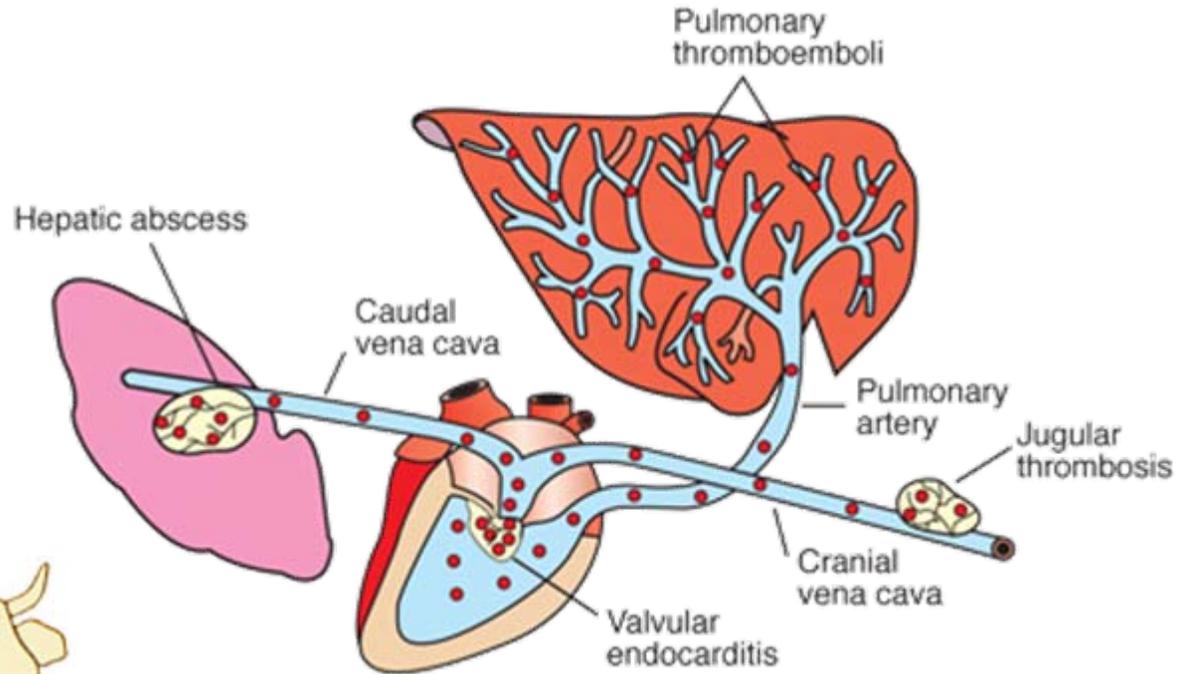
Secuela:

- Fibrosis pulmonar



NEUMONIA EMBOLICA

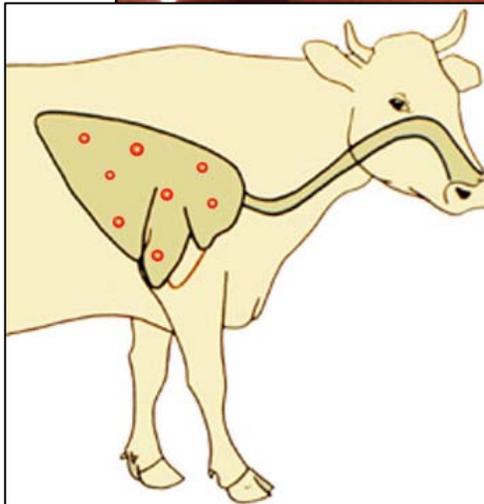
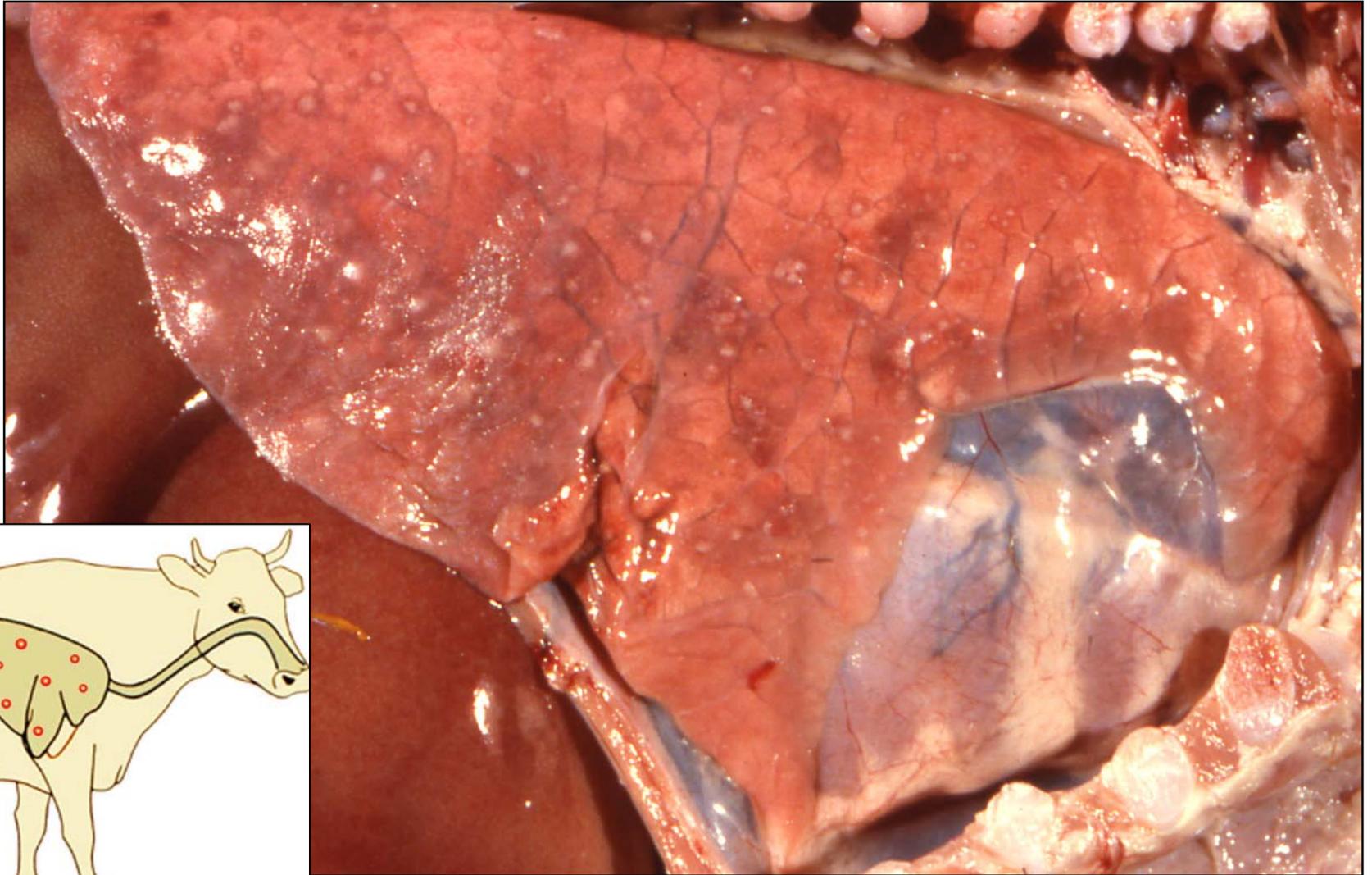
- Multifocal
- Textura nodular
- Vía hematógica



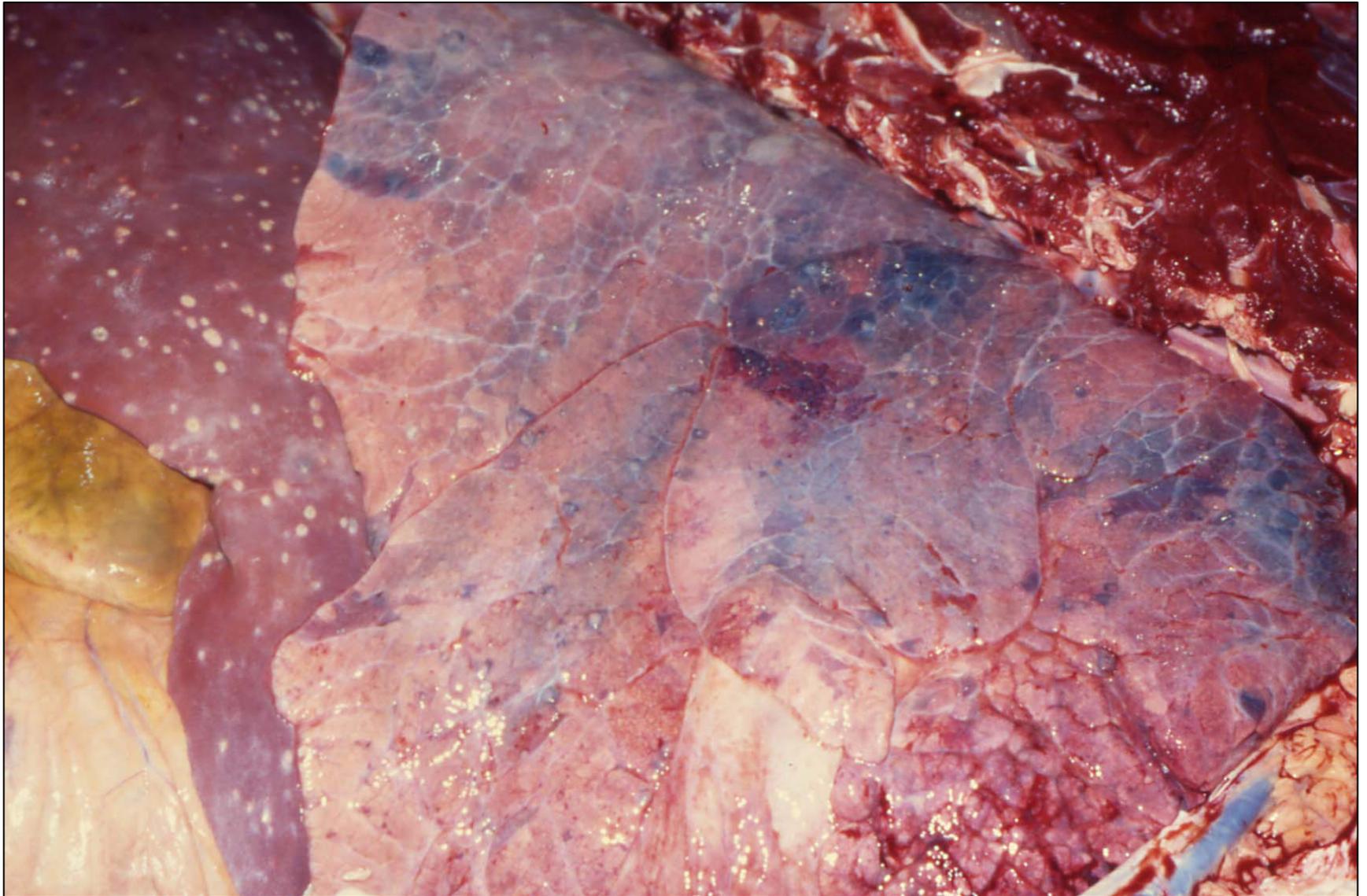
Etiología:

- Endocarditis
- Ruptura de abscesos hepático
- Onfaloflebitis
- Tromboflebitis de vena yugular

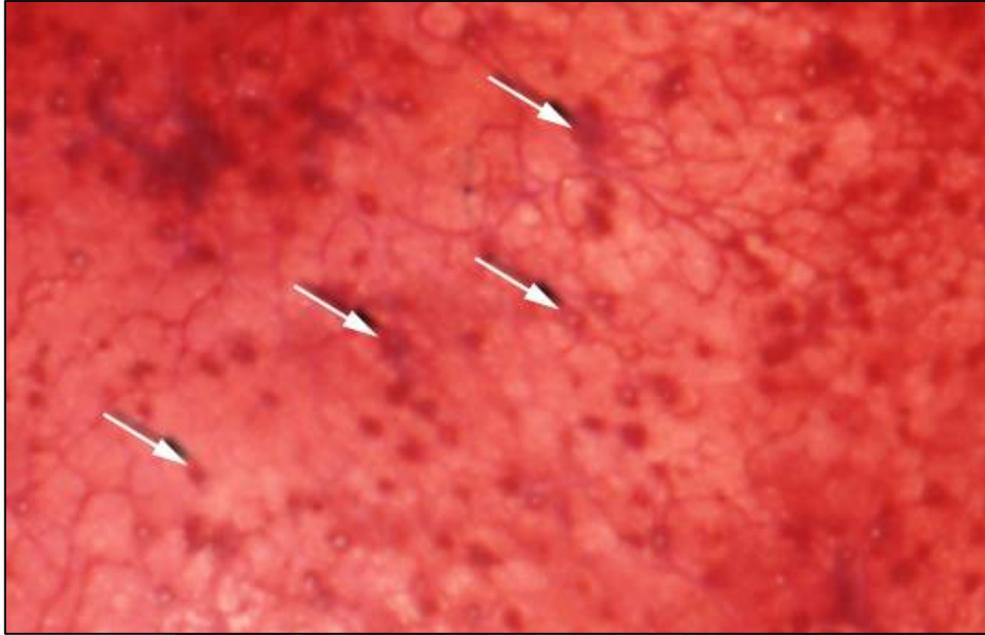
Neumonía Embólica



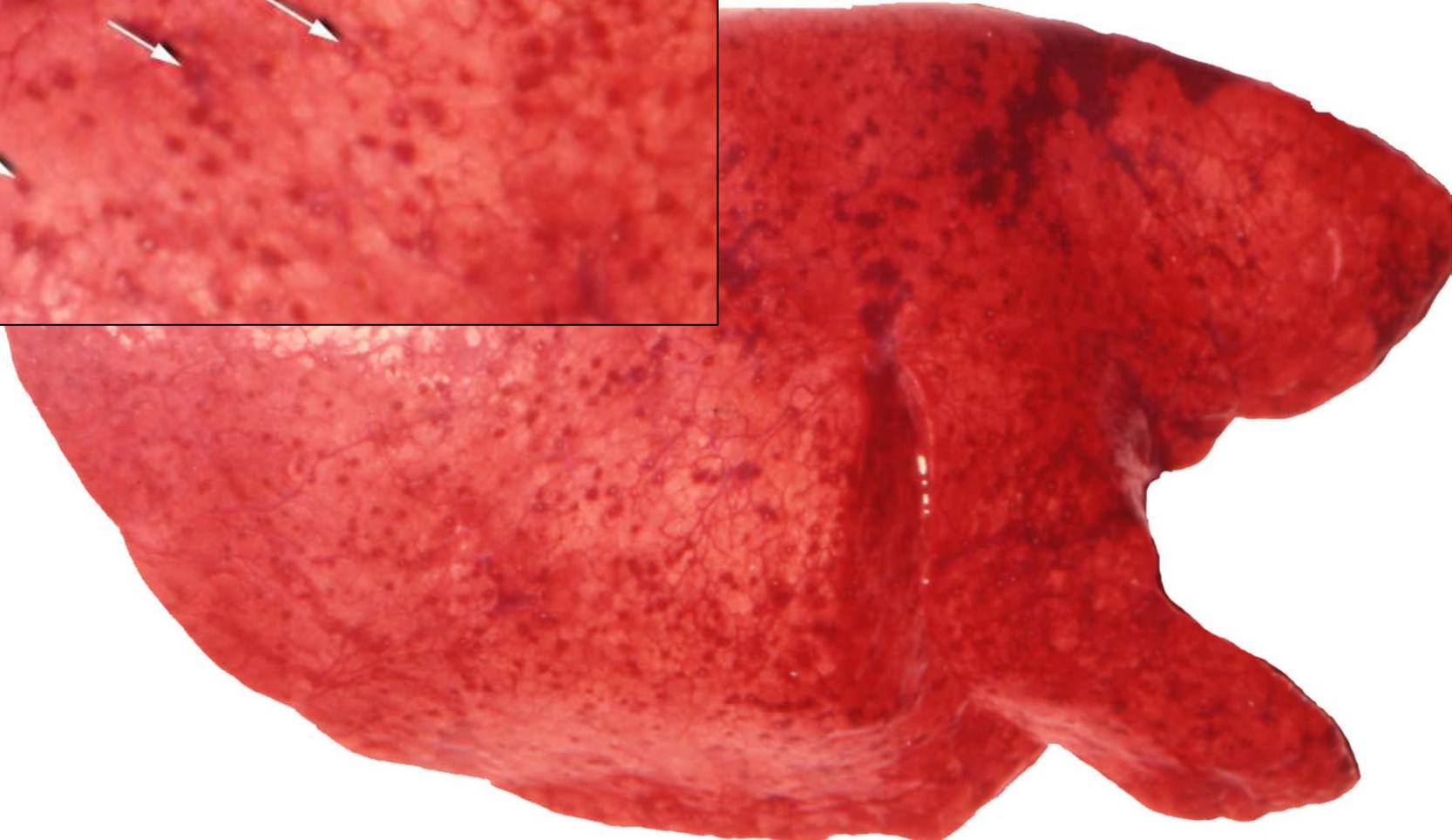
Neumonía Embólica



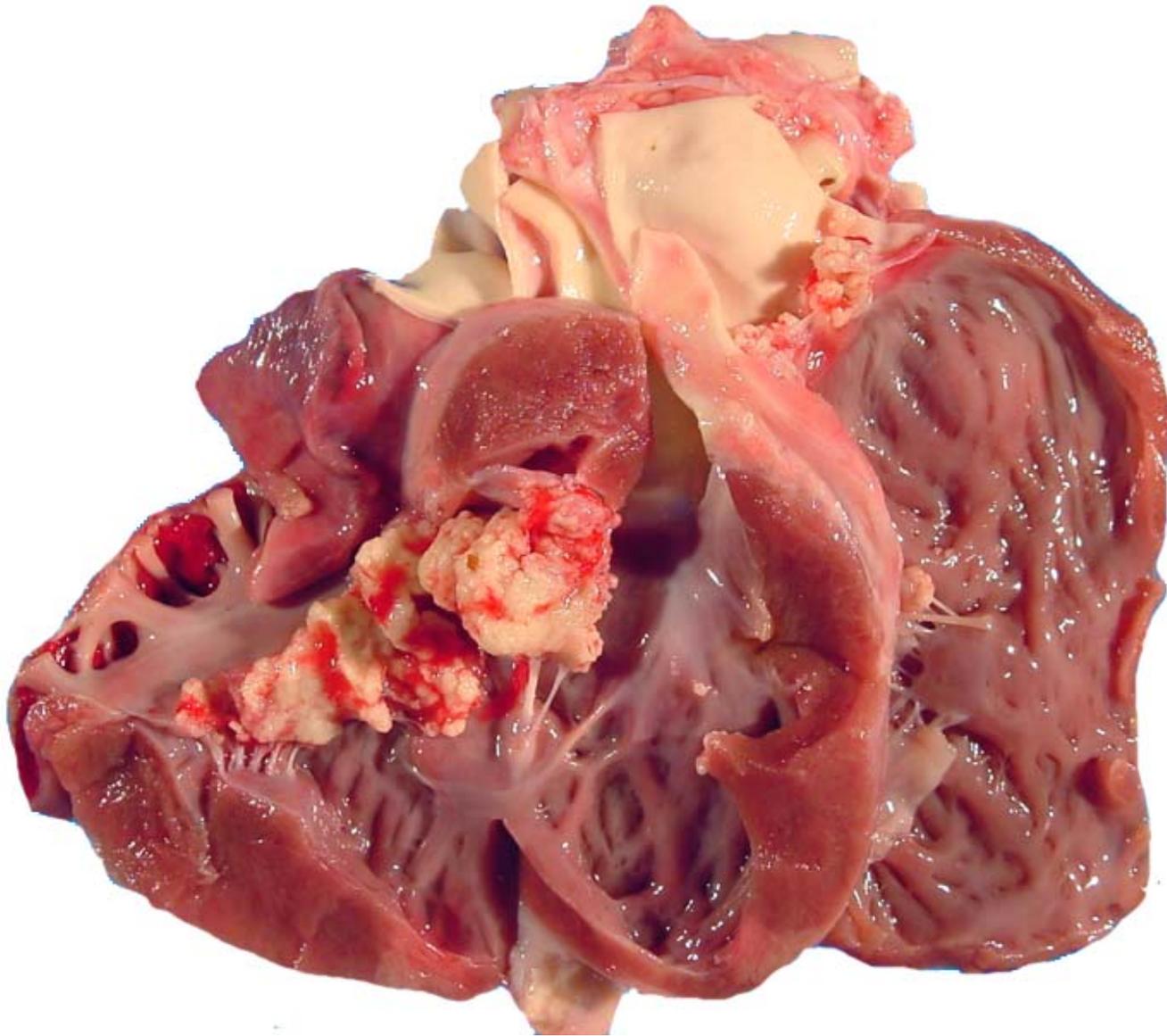
Neumonía Embólica (Potro)



Lesiones focales (flechas)



Endocarditis Vegetativa

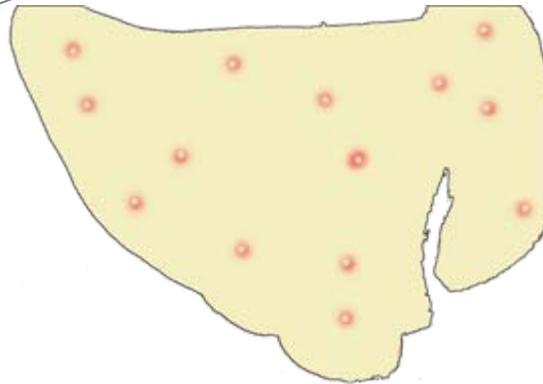
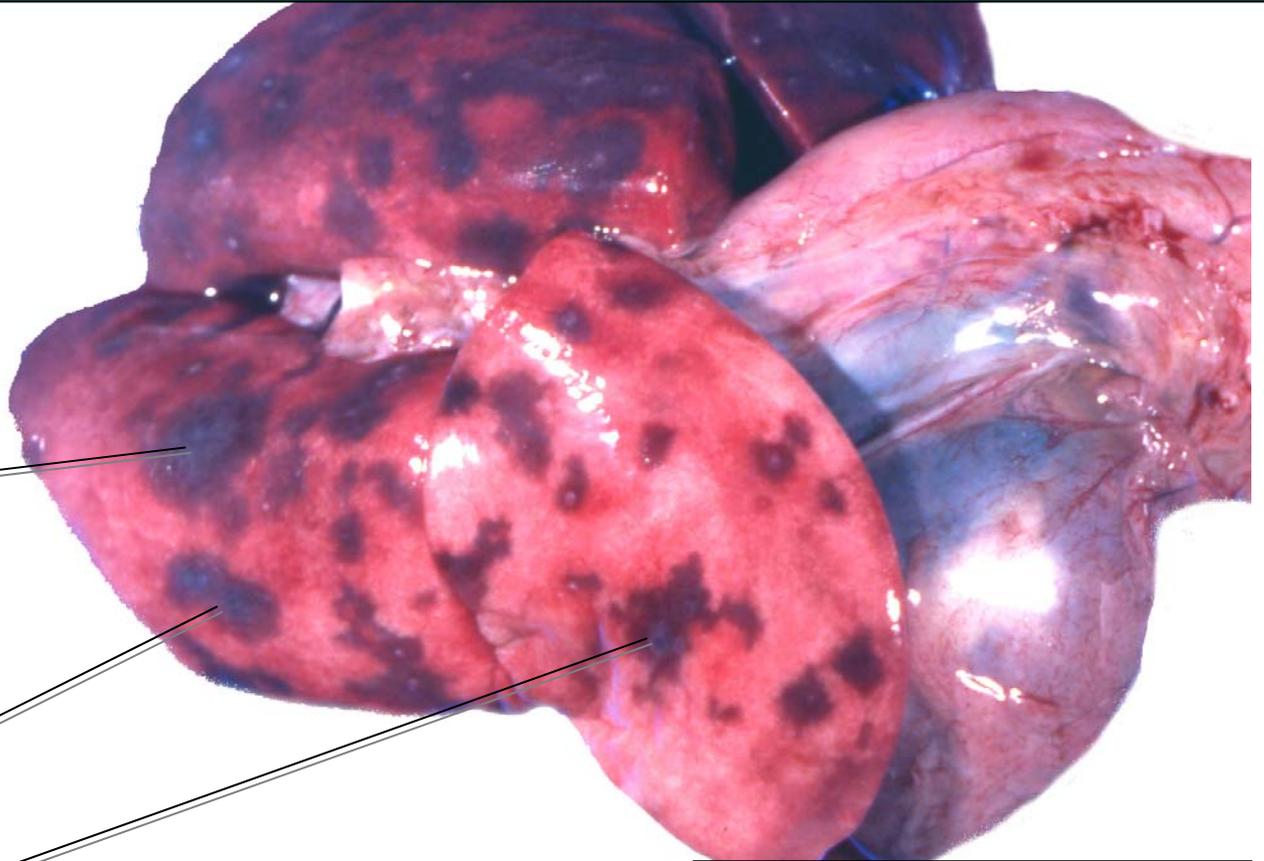
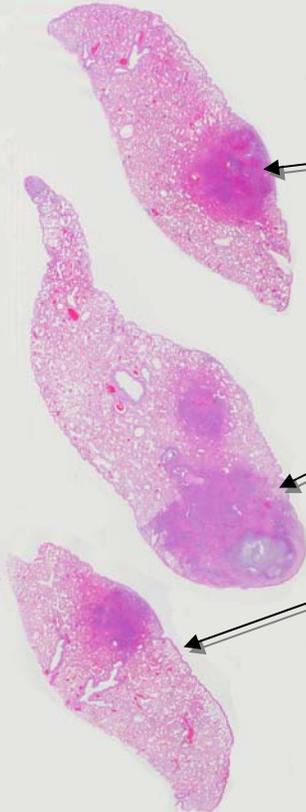


Neumonía Embólica

AVC

C-27105-05

SNOWCOAT®



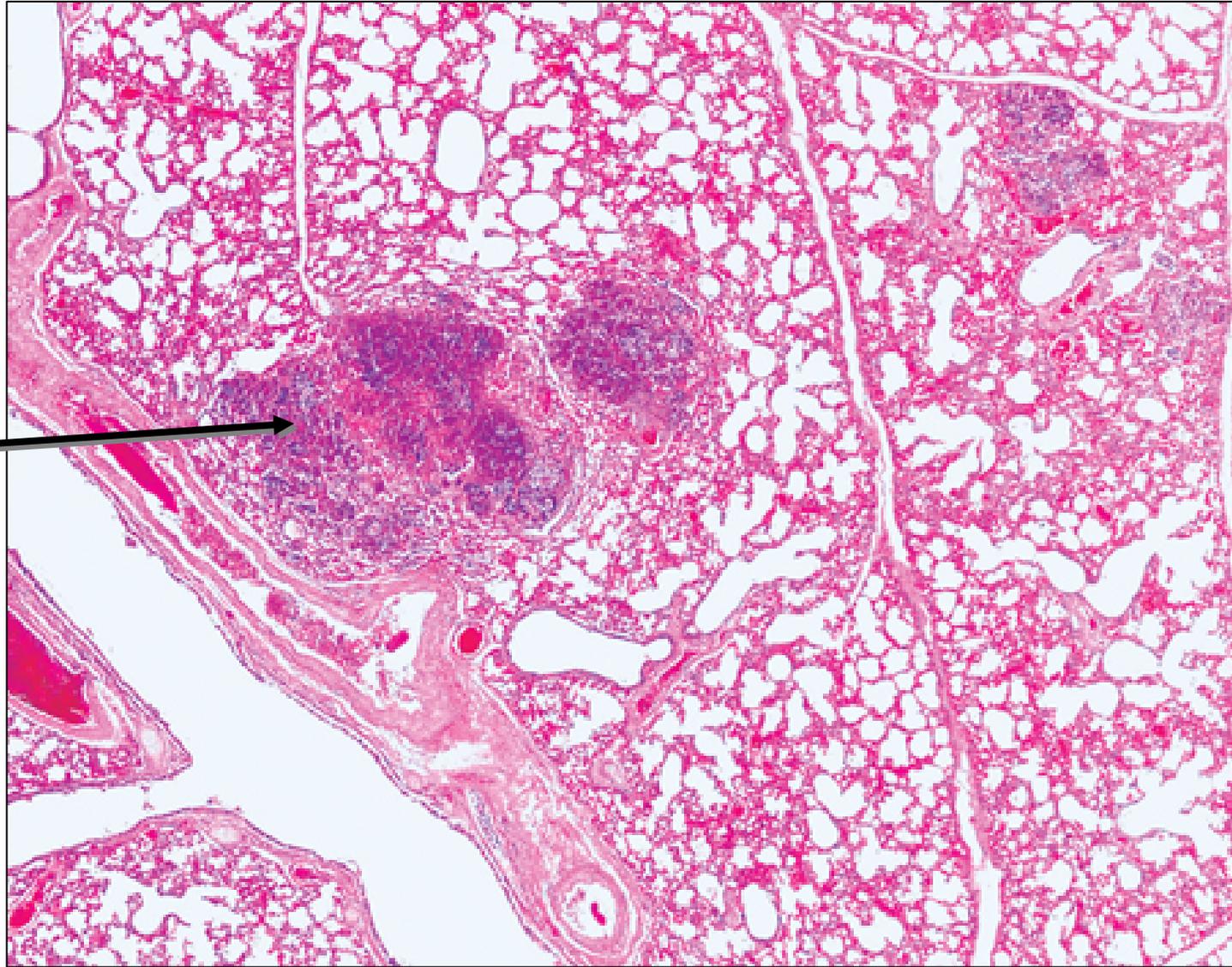
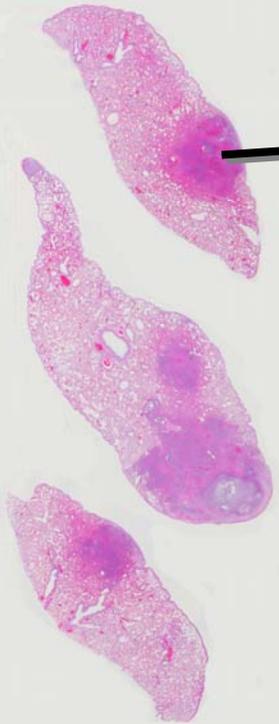
Endocarditis, perro

Neumonía Embólica (Histopatología)

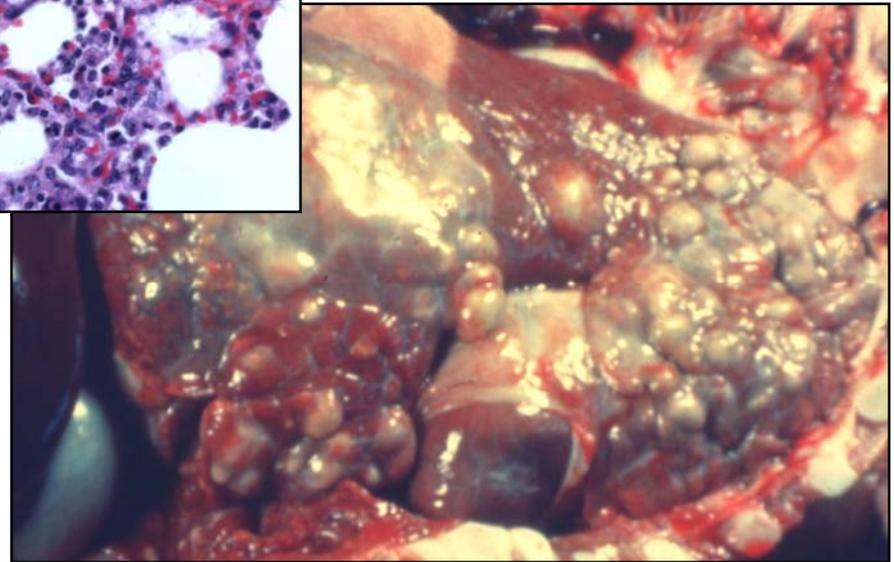
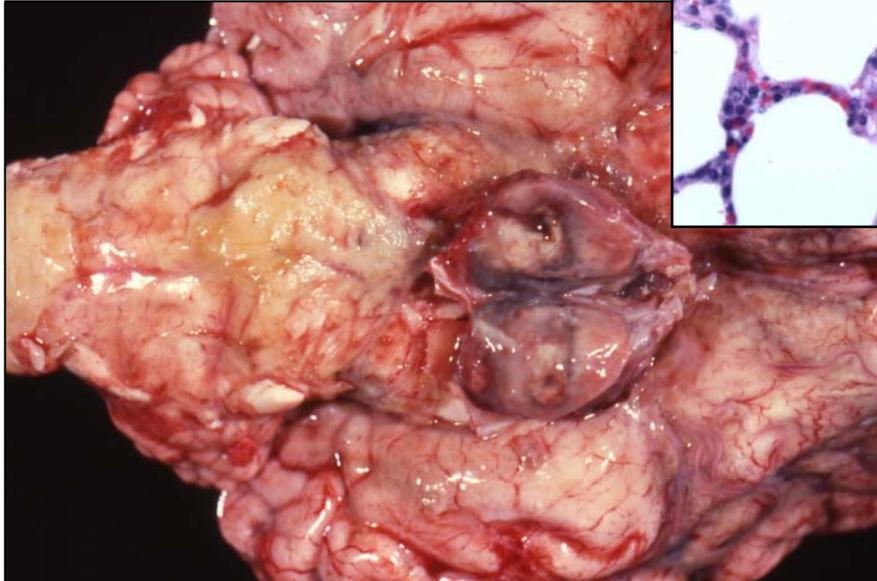
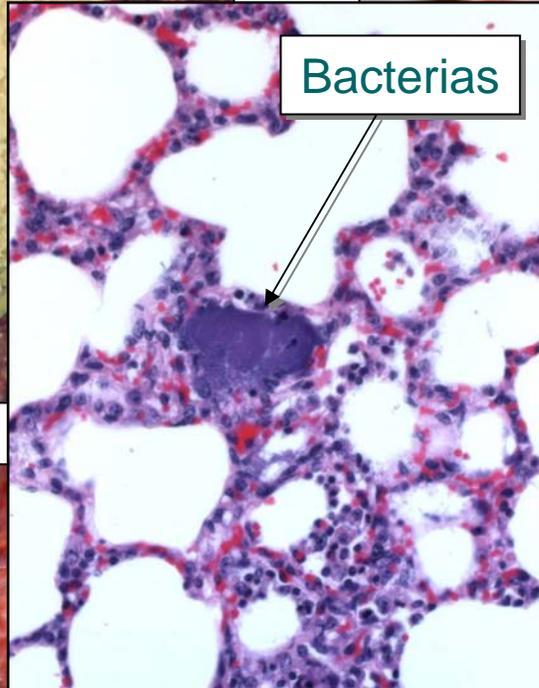
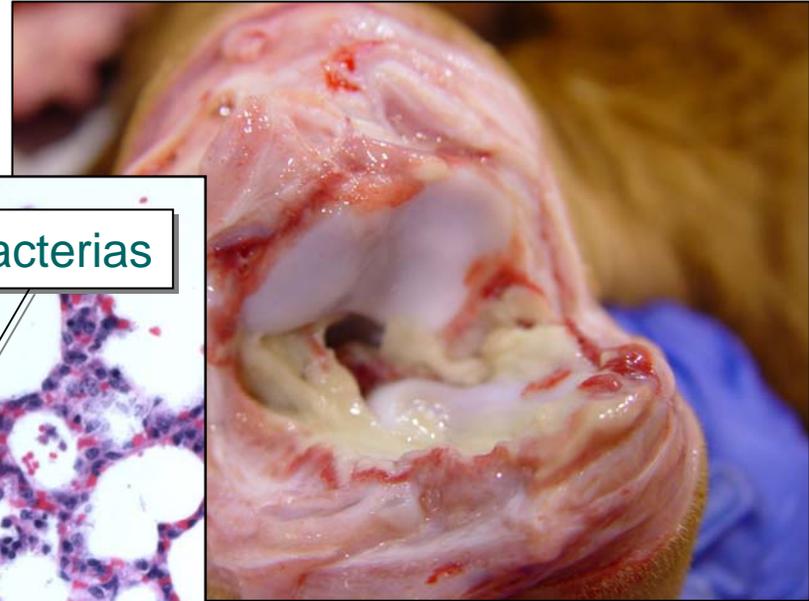
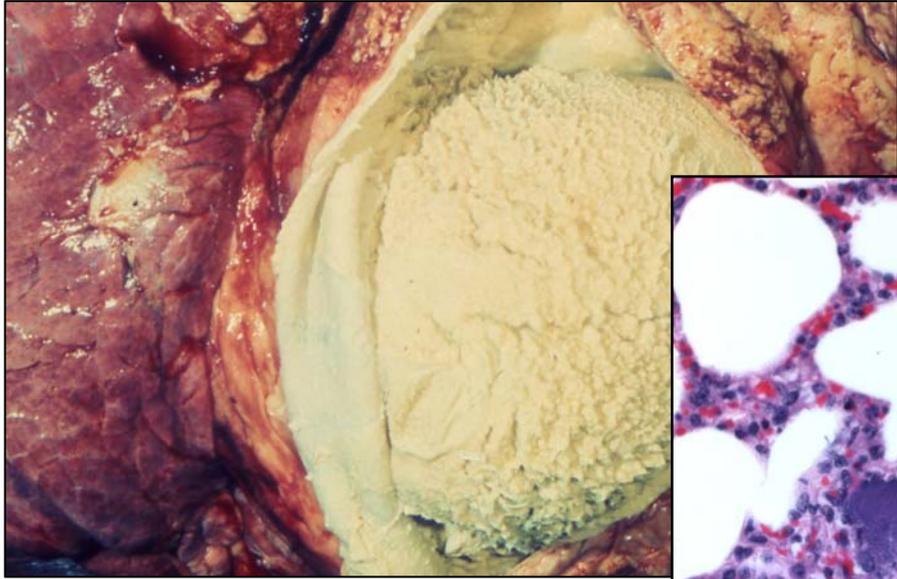
AVC

C-27105-05

SNOWCOAT®

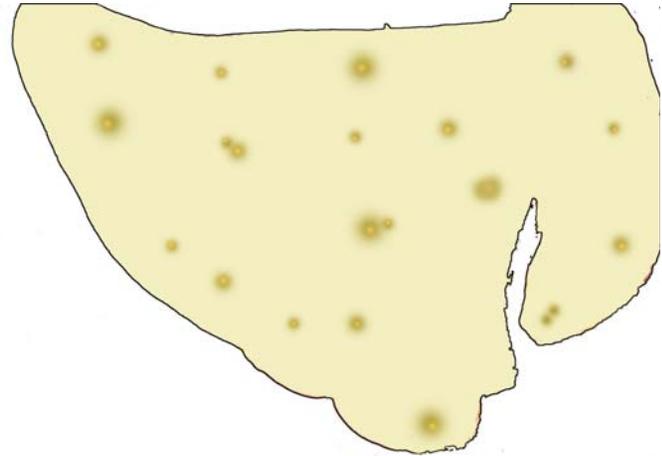


Neumonía Embólica



Neumonía Granulomatosa

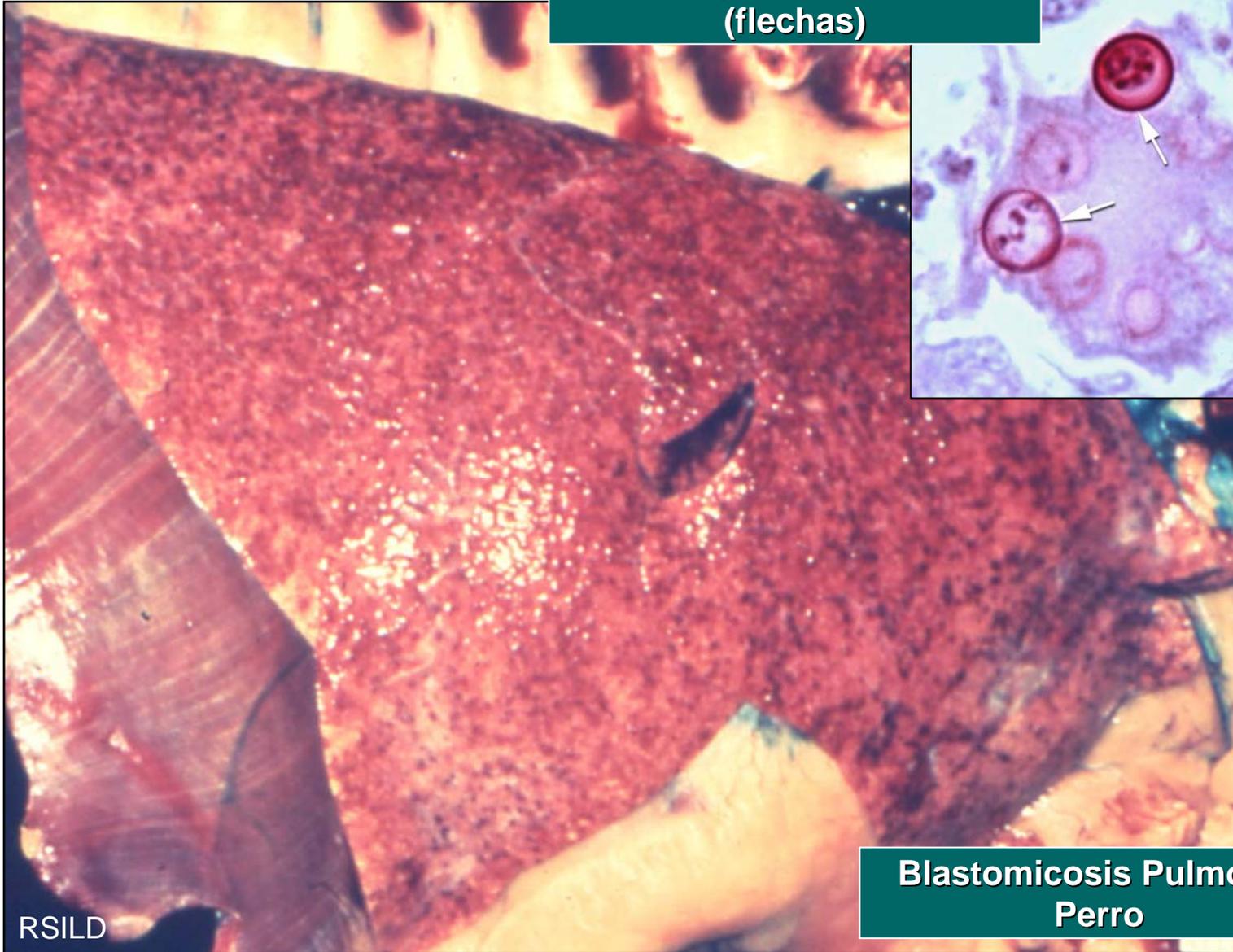
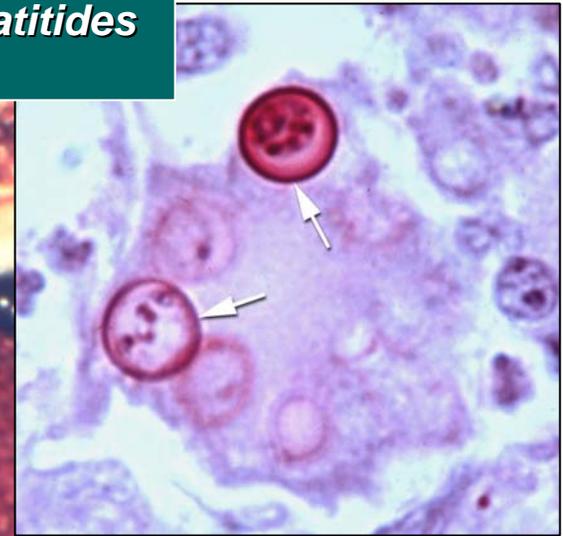
- Distribución multifocal
- Textura nodular
- Superficie de corte: granulomas
- Puerta de entrada:
 - Aerógena
 - Hematógena
- Etiologías comunes:
 - *Mycobacterium spp*
 - Micosis Sistémicas
 - Huevecillos de parásitos
 - Partículas extrañas



**Tuberculosis
bovina**

Neumonía Granulomatosa

Blastomyces dermatitides
(flechas)



Blastomycosis Pulmonar
Perro

RSILD

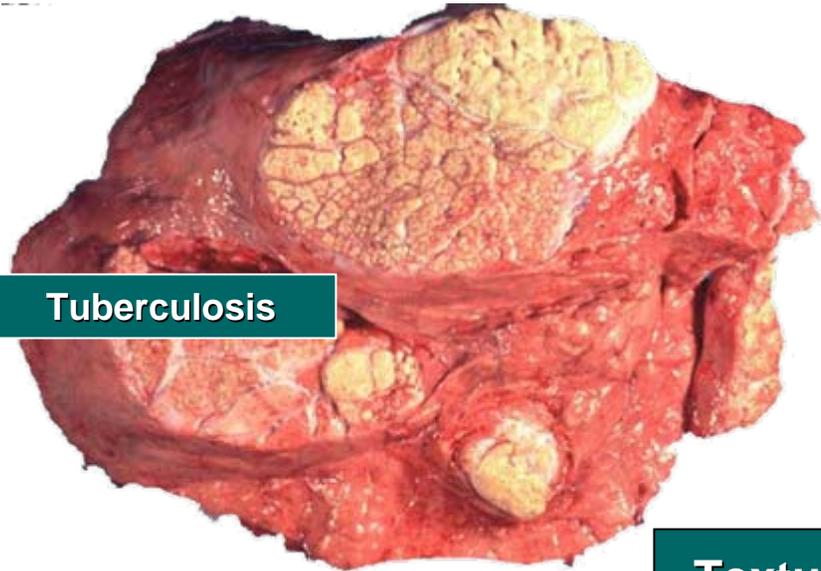
Neumonía Granulomatosa (Superficie de corte)



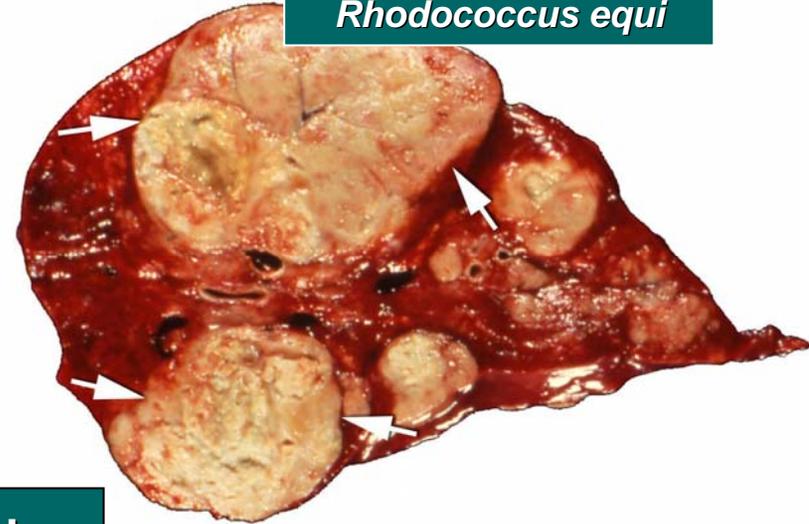
Histoplasmosis
Caballo



Neumonía Granulomatosa

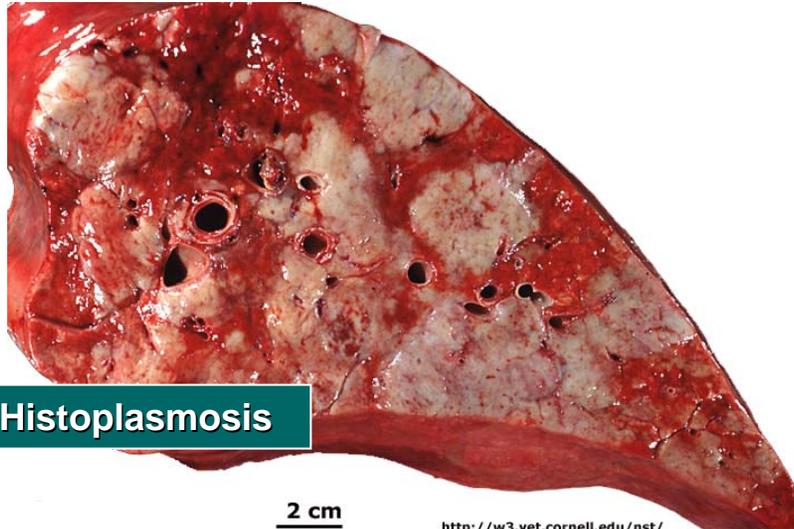


Tuberculosis



Rhodococcus equi

Textura Nodular



Histoplasmosis

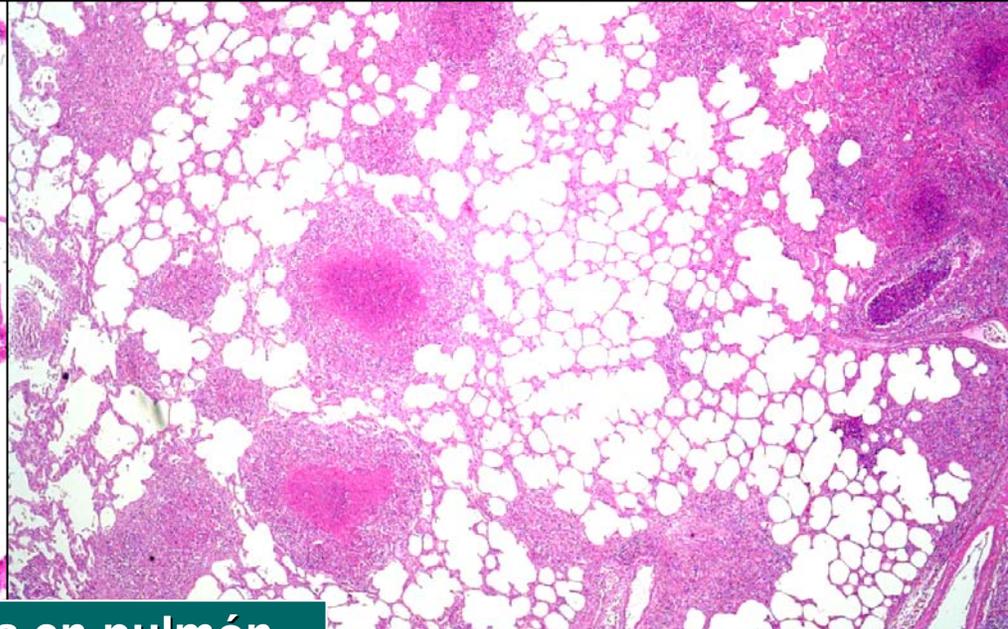
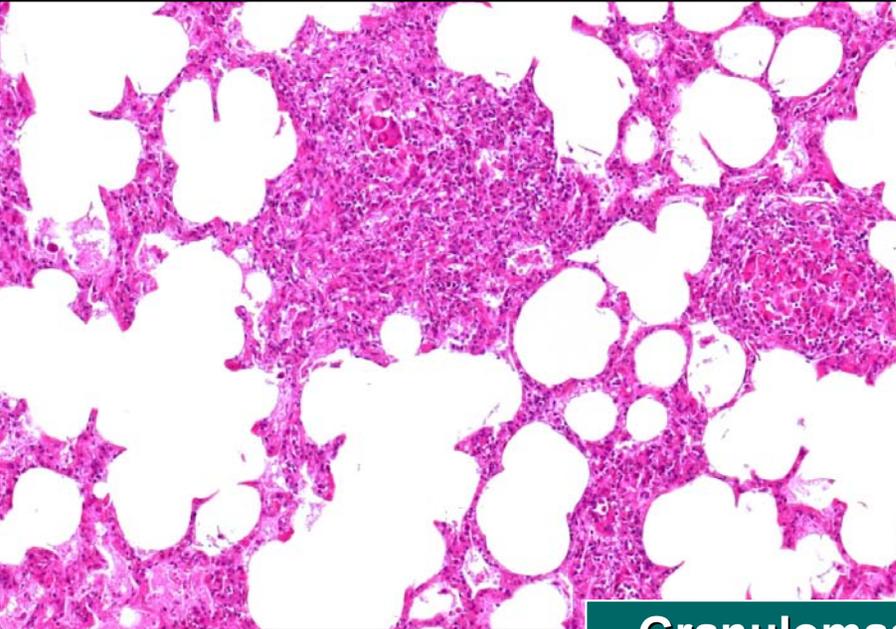
2 cm

<http://w3.vet.cornell.edu/nst/>

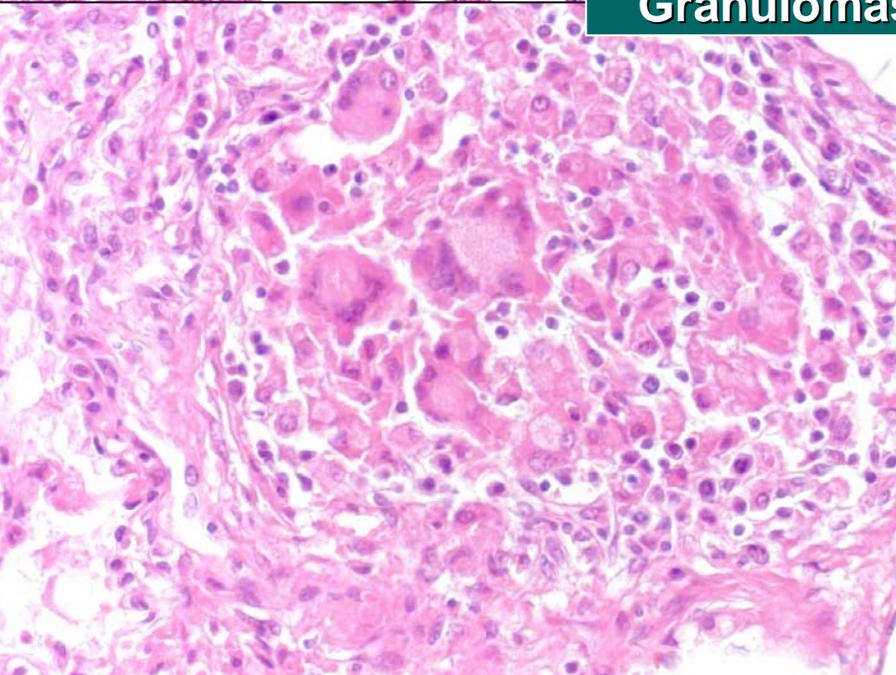


Muellerius capillaria

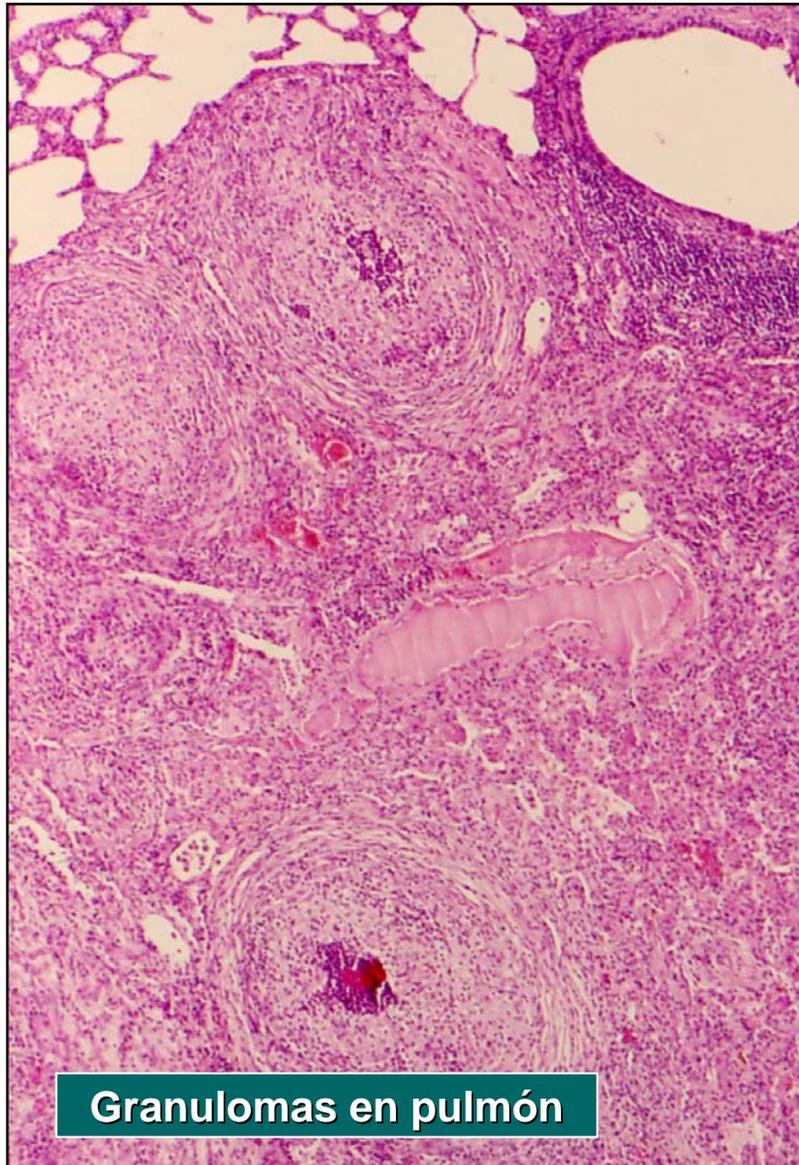
Neumonía Granulomatosa (Histopatología)



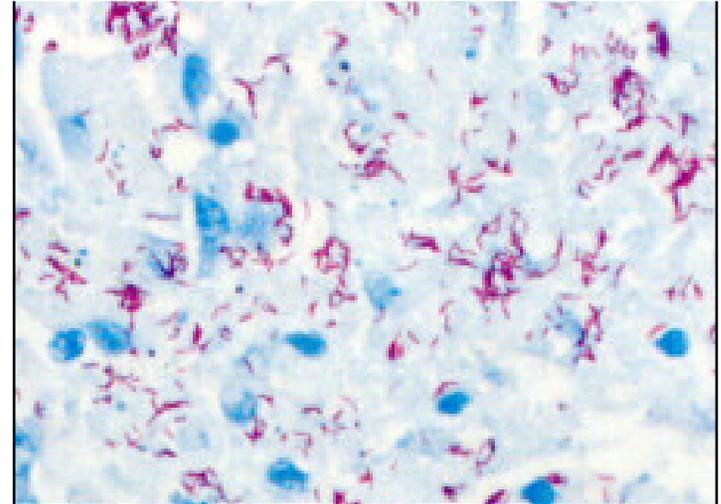
Granulomas en pulmón



Neumonía Granulomatosa (Histopatología)



Bacterias acido-alcohol resistentes

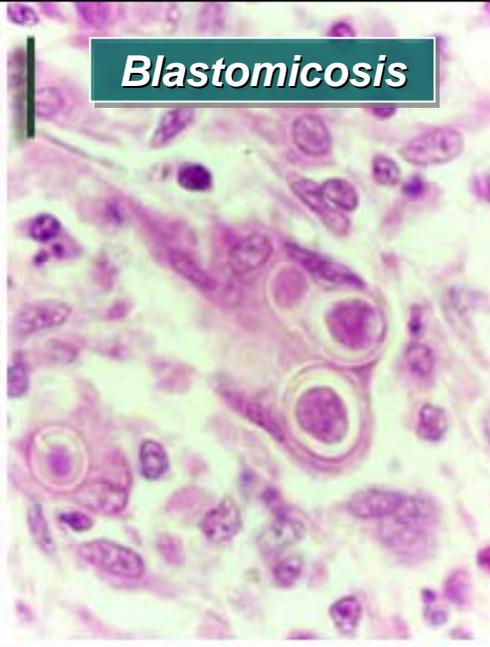


Neumonía Granulomatosa (Histopatología)

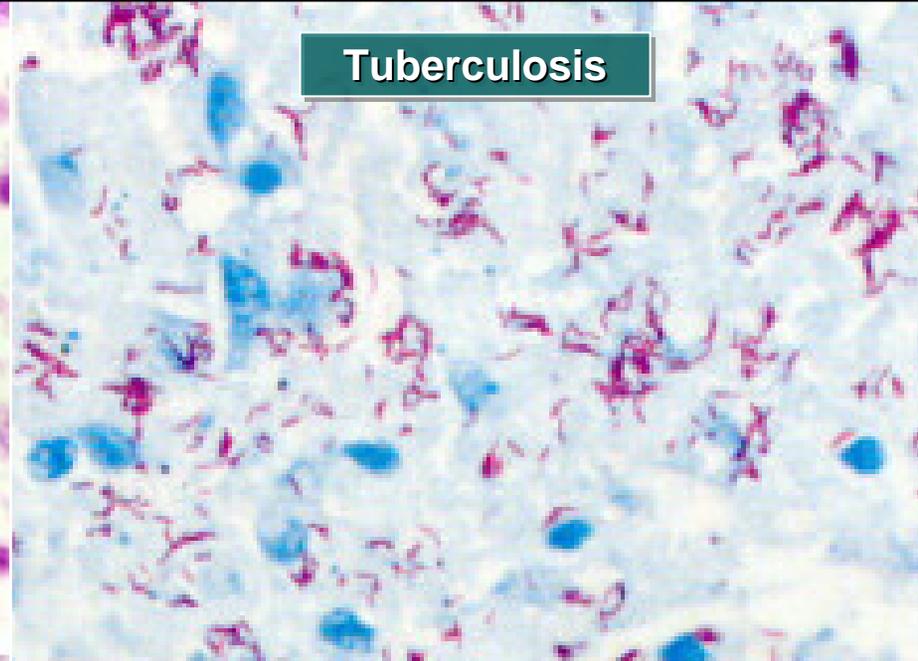
Coccidioidomycosis



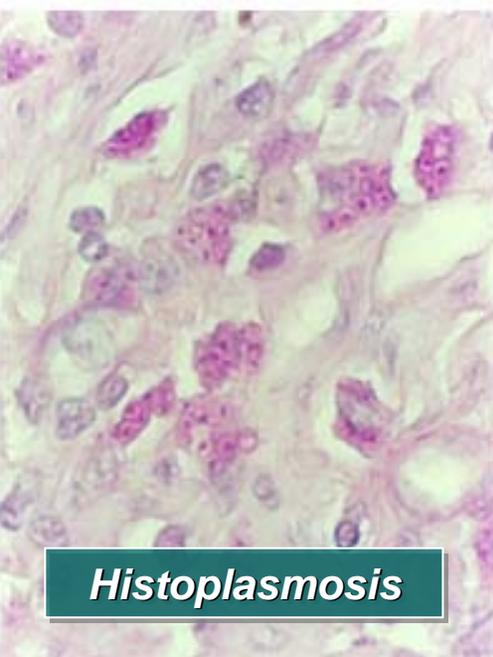
Blastomycosis



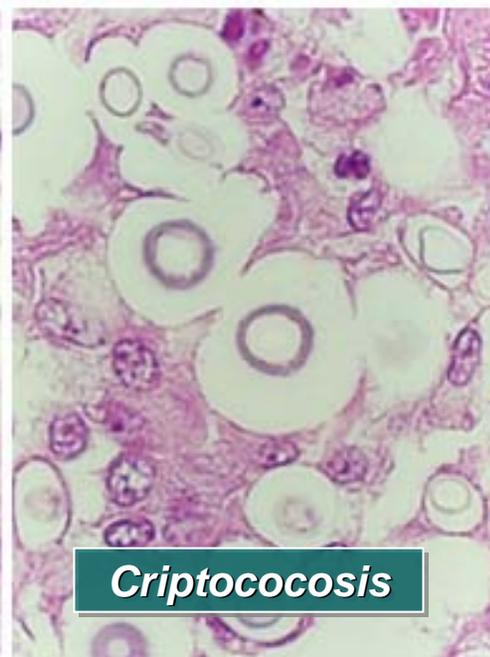
Tuberculosis



Histoplasmosis



Criptococosis



Nematodos pulmonares





Reconocimiento, Apoyo y Notas

Todas las imágenes fueron adquiridas de colecciones de Facultades de Medicina Veterinaria de Canadá, Estados Unidos y México.

En algunos casos el nombre del patólogo se desconoce; su apoyo se agradece sinceramente.

Acceso Internet: <http://people.upei.ca/lopez/>

Mandar comentarios a: lopez@upei.ca

Organizado por CENASA