Case 24
(A14-25087)

Presenter: Fabiana M. Boabaid, DVM, MS
Visiting PhD Student at UGA

Co-authors: Mauricio Seguel, DVM and Corrie Brown, DVM, PhD, DACVP
History

- English Pointer
- 3 years old
- Male

- Group of 14 hunting dogs
Necropsy

- Thin body condition
- Pale mucous membranes
- Sunken eyes
- SQ tissue sticky
Necropsy

• Two liters of red-tan opaque fluid in thoracic cavity
Necropsy

- Two liters of red-tan opaque fluid in thoracic cavity

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Necropsy

- **Pleura**
  - Thickened, nodular, velvety, multiple adhesions
- **Lungs**
  - Collapsed
Necropsy

- Multiple yellow granules measuring 3mm in diameter
Impression Smear

Bacteria that were positive in modified acid-fast stain
Macrophages, neutrophils, lymphocytes, plasma cells, fibroblast proliferation and blood vessels
Multiple large basophilic masses composed of radiating filamentous structures
Extensive atelectasis
Morphologic diagnosis

• Pleura:
Pleuritis, proliferative and pyogranulomatous, diffuse, chronic, severe, with filamentous acid-fast bacteria

• Lung:
Focally extensive severe atelectasis
Comments

• The findings are consistent with pyogranulomatous pleuritis caused by *Nocardia* sp.
Comments

• *Nocardia* is a bacteria present in the environment (soil, plant material, dust)

• In many cases, *Nocardia* can be associated with other commensal bacteria

• The other agent that causes similar disease in dogs is *Actinomyces* (not acid-fast)
Comments

- **Hunting dogs**: predisposed to inhalation of contaminated plant material (grass awns) → aerodynamic shape → carried to the lower respiratory tract → perforating visceral pleura → **PLEURITIS**
Thanks!