SCWDS CLINICAL CASE 366-09
SLIDE # W09-538

Steven Kubiski, Justin Brown, Kevin Keel
Southeastern Cooperative Wildlife Disease Study
College of Veterinary Medicine
University of Georgia

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1.5 yr, female white-tailed deer

History of multiple ulcerative lesions on skin and muzzle reported by landowner in Georgia.
Gross lesions

Multiple sections of affected skin submitted, characterized by focally extensive areas of thickening with alopecia, erythema crusting, serosanguinous discharge, and multiple small ulcerations.

Lesions were sharply demarcated from normal, surrounding tissue.
Morphologic Diagnosis

- Severe, chronic, multifocal nodular to coalescing, pyogranulomatous dermatitis with intralesional Splendore-Hoeppli material and Gram-positive, filamentous bacteria.

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Aerobic culture: *Streptomyces* sp. cultured

- Gram-positive
- Aerobic
- non-motile
- Filamentous
- Spore-forming

- Clinical disease is rare in both animals and humans.
- “Mycetoma” reported in humans
- Invasive streptomycosis in hospitalized/immuno-compromised patients

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Actinomycotic mycetoma

- **Actinomycetales**
  - *Actinomyces* spp
    - Anaerobic
  - *Nocardia* spp
    - Partially acid-fast
  - *Mycobacterium* spp
    - Strongly acid-fast
  - *Actinomadura* spp
    - Non-acid fast

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Other rule-outs

- Eumycotic mycetoma
- Dermatophytic pseudomycetoma
- Bacterial pseudomycetoma
  - *Staphylococcus*
  - *Streptococcus*
  - *Pseudomonas*
  - *Proteus*
  - *E. coli*
  - *Actinobacillus*
Conclusion

- Frequently a contaminant
- Consider a rule-out or contributing factor with compatible lesions

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Acknowledgments

- Brandon Rutledge (GA DNR)
- Justin Brown (SCWDS)
- Kevin Keel (SCWDS)
- Andrew Allison (SCWDS)
- Rick Gerehold (UGA Pathology)
- Susan Sanchez (UGA VDL)
- Ashley Phillips (UGA VDL)

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