Case #54: Cutaneous Nodule in a Horse

Joanna Hyland, Russell Cattley

Department of Pathobiology
Auburn University College of Veterinary Medicine
History and Physical Exam

- 16-year-old, male, American Paint Horse

- Presented for a 1.5cm diameter mass on the flank that had slowly increased in size over the last 20 months
Morphologic Diagnosis:
Pyogranulomatous dermatitis with intralesional pigmented yeast, hyphae, and pseudohyphae

Fungal Culture:
*Curvularia* sp.

Etiologic Diagnosis:
Cutaneous phaeohyphomycosis
Cutaneous phaeohyphomycosis

- Dematiaceous (pigmented) fungi ubiquitous in soil, wood, and vegetation

- Species commonly affected:
  - Cats (most commonly reported)
  - People
  - Horses
  - Dogs
  - Cattle and goats
  - Fish and birds
Cutaneous infection

- Opportunistic infection that occurs through contamination of wounds
- Gross lesions include single or multiple subcutaneous nodules
- Over 70 species in multiple genera are causative agents of phaeohyphomycosis
CNS and systemic infection

- Infection is thought to occur due to hematogenous dissemination of cutaneous or inhaled organisms

- Central nervous system infections are most commonly caused by *Xylohypha bantiana* (*Cladosporium bantianum*)
Diagnosis

- Microscopic: pigmented yeasts, hyphae, and pseudohyphae within dermal nodules

- Unstained sections or staining with Fontana Masson may help to identify pigmentation

- Etiologic diagnosis is confirmed with culture
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Differential Diagnosis

- **Gross findings:**
  - Melanoma

- **Histopathologic findings:**
  - Dematiaceous eumycotic mycetoma
  - Chromoblastomycosis

- **Yeast:**
  - *Blastomyces dermatitidis*
  - *Cryptococcus neoformans*
  - *Histoplasma duboisi*
Questions?

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References


