Case #R16-1020

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Signalment and history

- 6-month-old female black lop-eared rabbit
- Recently acquired by inattentive veterinarian
Morphologic Diagnosis

- Fibrinoheterophilic anterior uveitis, chronic, diffuse, severe, with lens degeneration and rupture and anterior synechiae

- Gram stain: rare 2 x 4 μm oval Gram positive organisms interspersed around fragmented lens fibers and within macrophages

- Consistent with *Encephalitozoon cuniculi*
**Encephalitozoon cuniculi**

- Microsporidial parasite of rabbits
- Causes renal, hepatic, pulmonary, cardiac, central nervous system and ocular disease
- No correlation with serum titers
- Intraocular infection
  - Young rabbits
  - Suspected transplacental transmission
  - Spore induce rupture of lens → release of lens proteins
    → Phacoclastic uveitis
- Differential Diagnoses: bacterial uveitis, lenticular trauma, geriatric cataract formation

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Microsporidial spores are birefringent with many commonly used histopathology stains using polarized light.
Transmission electron micrographs of Encephalitozoon cuniculi organisms within a renal tubular cell.

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