What a headache!

Christopher LeRoy
Tuskegee University
Case: N12-150C
May 21, 2017
- Name: Fancy
- Age: 12 years and 11 months
- Weight: 14lbs 9oz
- Gender: Female
- Spayed: Yes
- Breed: Bombay
- Species: Feline
• Presented to TUCVM in February 2012 for respiratory signs
  • Clinical Diagnosis: Herpes Viral Upper Resp. Tract Infection
  • Tx: Lysine nutritional support

• Presented to TUCVM in April 2012 for convulsive attacks.
  • Clinical Diagnosis: Intracranial Disease
  • Tx: Phenobarbital elixir

• Presented to TUCVM in June 1, 2012 for convulsive attacks.
  • Patient expired on June 1, 2012
• A thick dark yellow to green nasal discharge

• In the left cerebrum rostral to the lateral ventricle, there was a round, light red, 1 cm mass.
H&E 4x

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Differential Diagnosis

- **Ependymoma**
  - Cellular & Papillary subtypes: Pseudorosettes
  - GFAP stroma (+); Vimentin (+)
  - CK (-)

- **Choroid Plexus Tumor**
  - Arboriform pattern
  - CK (+)
  - GFAP stroma (-)

- **Lung Adenocarcinoma**
  - Papillary and acinar structures
  - Secretory material
  - Ciliated columnar cells
  - TTF-1 (-)

- **Thyroid Follicular Carcinoma**
  - Papillary subtype
  - Columnar to cuboidal epithelium
  - TTF-1 (+)

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CK 4x

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CK 18 4x

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TTF-1 4x

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TTF-1 40x

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Special Stains
• Choroid Plexus Carcinoma
  • CK (+)
  • CK18 (+)
  • GFAP (-)
  • Invasion, necrosis, piling of epithelium, anisokaryosis,
Choroid Plexus Tumors

- Reported in dogs, cats, horses, and cattle
- 9% of primary CNS tumors in domestic animals
- Hydrocephalus by compression or overproduction of CSF
- Papillary or Carcinoma (rare)
  - Cellular atypia and invasiveness are differentiating features
- Positive for epithelial markers but not glial markers
- Common DDx – papillary ependymomas
• Tumors in Domestic Animals, 4th Ed., Donald J. Meuten

• Pathology of Domestic Animals, 5th Ed., Vol. 1., Jubb, Kennedy, and Palmer

• Pathologic Basis of Veterinary Disease, 5th Ed., James F. Zachary and M. Donald McGavin


• https://www.askjpc.org/vspo/show_page.php?id=534

• https://www.askjpc.org/vspo/show_page.php?id=531

References

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• Sammy Gorham, DVM, PhD
  • Tuskegee University

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  • Auburn University

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