Neurologic Disease in a Horse
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Signalment/History

- 3 Year old Paint Horse mare
- Presented 5/20/12 lateral recumbency
- Head tilt, ataxia of 5 days duration
- Cast
Physical Exam

- 5/9 BCS
- TPR = WNL
- PLR sluggish
- Hyper-reflexive palpebral response
- Limbs extended
- Tongue fasciculations
Histologic Diagnoses

- Cerebrum, cerebellum, and medullary encephalomalacia and encephalitis, multifocal, severe, chronic, with intralesional nematodes consistent with *Parelaphostrongylus tenuis*

- Bronchopneumonia, severe, necrot suppurative and hemorrhagic, with intralesional foreign material and bacterial colonies (Aspiration Pneumonia)
Parelaphostrongylus tenuis

- “Brainworm”, “meningeal worm”
- White tail deer = natural host
- “Moose Sickness” 1912, ID 1963
- Clinical signs include ataxia, stiffness, muscular weakness, hypermetria, paresis, paralysis, head tilt, arching neck, circling, blindness, weight loss, depression, seizures, and death
- Usually hind limbs progressing to the front limbs
- Acute or chronic
Aberrant hosts

- Moose, Goats, Sheep, elk, caribou, mule deer, reindeer, llama, horses, antelope sp.
- Do not produce eggs, and the infected animal becomes severely ill.
- Acute onset scoliosis nearly diagnostic in equines. 6 mo-3 years of age.
- Migratory predilection in horse for dorsal gray column of the cervical and sometimes thoracic cord
- Not zoonotic
Diagnostics/Treatment

- Antemortem- CSF tap
- Variable CSF eosinophilia, xanthochromia
- PCR
- Currently no successful treatment reported in horses
“Are we standing on a hill?”