Ivermectin Toxicosis in Three Adult Horses

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Ivermectin toxicosis can occur in adult horses and should be considered in acute cases of neurological impairment with a history of anti-parasitic administration. Authors’ address: Department of Large Animal Clinical Sciences, Texas A&M University, College Station, TX 77845-4475 (Swor, Chaffin); VCA Saginaw Hospital, 817 Saginaw Blvd., Saginaw, TX 76179 (Whittenburg); e-mail: tswor@cvm.tamu.edu. © 2008 AAEP.

1. Introduction
Ivermectin toxicosis is an uncommonly reported condition in equidae. This study describes the history, clinical signs, treatment, and outcome of horses with acute ivermectin toxicosis after routine administration of commercial ivermectin paste.

2. Materials and Methods
Medical records of three healthy adult Quarter Horses presenting with acute, progressive neurological signs were evaluated. All received a single, appropriate oral dose of 1.87% ivermectin (0.2 mg/kg) paste 18 h before clinical signs.

3. Results
Presenting horses were obtunded, and they exhibited fore and hindlimb ataxia, muscle fasciculations, and flaccid upper and lower lips. Bilateral mydriasis, decreased pupillary light reflexes, and absent menace reflexes were noted. Severity of clinical signs progressed for an additional 36 h. Horses were treated supportively. Two horses survived, and one horse was euthanized because of the severity and progression of signs. Necropsy results identified high levels of ivermectin within the brain tissue. Paste product concentrations were within normal limits.

4. Discussion
Ivermectin seems able to cross an impaired blood/brain barrier, resulting in clinical signs similar to those reported in other species. Contributing factors may include consumption of toxic plants (silverleaf nightshade), genetic conditions, and incorrect dosages. Recovery from ivermectin toxicosis is possible with supportive care and time.