CROSS-CANADA DISEASE REPORT

RAPPORT DES MALADIES DIAGNOSTIQUÉES AU CANADA

Ontario

Equine arteritis virus isolated from a Standardbred foal with pneumonia

n April of 1988 a five-day-old male Standardbred foal was presented for necropsy to the Veterinary Laboratory Services Branch of the Ontario Ministry of Agriculture and Food. Postmortem examination revealed bronchointerstitial pneumonia and petechial hemorrhages in the kidney and adrenal cortices. On June 15, a virus was isolated from a lung-spleen tissue pool, using both equine dermis cells and a rabbit kidney cell line (RK-13). This isolate passed through a 50 nm filter and was resistant to chloroform. Fluorescent antibody tests for EHV-1, adenovirus, and influenza A were negative. On July 7 the isolate was forwarded to the New York State Diagnostic Laboratory for confirmation of a diagnosis of equine arteritis virus (EAV). Fluorescent antibody assays, using polyclonal antiserum specific for EAV that had been prepared in a colostrum-deprived foal, confirmed a diagnosis of EAV on July 28. This is the first time EAV has been isolated in Ontario.

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Saskatchewan

Selenium toxicity in suckling pigs

A 15 sow, farrow-to-finish operation experienced high morbidity and mortality in suckling piglets, beginning 24 h after injections of selenium. Deaths continued to occur for four days, with a final toll of 22 of 48 piglets dead. Postmortem examinations revealed severe hepatic lipidosis, hepatic centrilobular necrosis, cerebral edema, and pulmonary congestion.

The piglets had been injected with two to three times the recommended dosage of selenium. The herd does have a previous history of selenium deficiencies, and it is perhaps pertinent to this case that selenium deficient pigs have been shown to be more susceptible to selenium toxicity than are pigs with normal selenium status. Record breaking high environmental temperatures (>40°C) were recorded in the days following the selenium injections; the possible effects of heat stress in this situation remain highly speculative.

References

- Herigstad RR, Whitehair CK, Olson OE. Inorganic and organic selenium toxicosis in young swine: Comparison of pathologic changes with those in swine with vitamin E - selenium deficiency. Am J Vet Res 1973; 34: 1227-1238.
- 2. Van Vleet JF, Meyer KB, Olander HJ. Acute selenium toxicosis induced in baby pigs by parenteral administration of selenium - vitamin E preparations. J Am Vet Med Assoc 1974; 165: 543-547.

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Alberta

Trypanosoma theileri in cattle of central Alberta

nfections with *Trypanosoma theileri* have been reported from most cattle-producing countries. Although *T. theileri* is generally considered to be nonpathogenic, reports have associated infections with decreased milk production, CNS disease, fetal or neonatal death, and anemia. In surveys previously conducted in the United States and parts of Canada, the prevalence ranged from 10% to 80%. During the spring and summer of 1985 a study was conducted to determine the species and prevalence of trypanosomal infections in cattle in central Alberta.