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A Fatality After Firing

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CLINICAL MEDICINE

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1 **Eye Worm of the Dog.** On December 29, 1942, the Veterinary Pathology Department of Iowa State College received three nematodes from Dr. J. S. Dick, Jr., Minneapolis, Minn. These worms were taken from the eye of a nine-year old female Samoyede. The owner stated that the dog was with him in California during the past summer and the worms were observed in the dog's eye about three weeks before their removal by Dr. Dick. They were identified by Dr. E. A. Benbrook as *Thelazia californiensis*, the eye worm of the dog. This is the first time this parasite has been reported outside of California, where they were apparently acquired by this dog.

The life cycle of this parasite is not known. It is thought, however, that some insect is an intermediate host. The worms are slender, whitish and translucent. The male is 12-13 mm. long and the female is 15-17 mm. in length.

The parasites cause damage by irritating the conjunctiva which eventually results in a mild or severe conjunctivitis. If this condition is not treated promptly, complications such as keratitis and secondary infection may occur.

Treatment of ocular thelaziasis has received little attention. The most common practice is to desensitize the eye and then remove the worms with forceps or a small cotton swab. The eye should then be irrigated with saturated aqueous boric acid solution. More than one treatment may be necessary in order to remove all of them. The after-treatment should consist of daily washing of the eye with

some mild astringent until the conjunctivitis has subsided.

In view of the probability that arthropods serve as intermediate hosts, it is advisable to keep all kennels and runs free from accumulation of feces, food and litter which might attract such transmitters.

The eye worm of the dog has also been found in the cat, sheep, deer and man living in California. The dog and cat are the only animals known to be naturally infested. Infestations of sheep, deer and man are thought to be accidental.

REFERENCES

- Price, E. W. 1931. A note on the occurrence of eye worms in dogs in the United States. No. Amer. Vet. 12:49-58 (Illus.).
Stewart, M. A. 1940. Ovine thelaziasis. Jour. Amer. Vet. Med. Assoc. 96:486-490.
—Harold A. Kjar, fall '43

2 **A Fatality After Firing.** A four-year-old brown gelding of light horse breeding was presented at the Stange Memorial Clinic on December 27, 1942. The animal was showing lameness in all four legs. The general condition was poor.

The history stated that the gelding was slightly lame in all ankles, and that "shin bucks" (a horseman's term meaning periostitis of the metacarpal bones) were present. Upon examination it was found that the principal trouble was chronic tendinitis of the flexor tendons of both front legs. No treatment was attempted for several days because of the poor condition of the animal. During this time one ounce of Fowler's solution was administered daily. Later, a fecal examination indicated severe strongylidosis and a few ascarids.

It was decided to fire the flexor tendons. The animal was given three ounces of chloral hydrate intravenously and was cast with very little difficulty. The hair was clipped over the fetlock joints and volar aspect of the metacarpal bones of both forelegs. The area was anesthetized by infiltration with a two percent procaine solution. Three rows of point firings were made on each leg over the flexor tendons, using the electric cautery. A biniodide blister (1-10) was applied, and cotton was bandaged into place over the firing wounds.

The next day the horse showed mild colic. Equal parts of aromatic spirits of ammonia and turpentine (one and one-half ounces) were administered per os. Later, the horse lapsed into a coma and was given strychnine sulfate (one-quarter grain) sub-cutaneously. The animal died the next afternoon without regaining consciousness.

Necropsy

On necropsy examination soft yellow thrombi which were caused by strongylidae larvae were found in the branches of the anterior mesenteric artery. An acute hemorrhagic cecitis was present. The right dorsal colon was impacted and the entire colon was filled with hay. Lesions of a septicemia were present. These lesions included epicardial and endocardial hemorrhages, pulmonary hyperemia and pulmonary hemorrhage. No bacterial cultures were made. *Gasterophilus intestinalis* larvae were found in the stomach and *Gasterophilus nasalis* larvae in the duodenum, which accounted,

at least in part, for the poor condition of the animal.

Since this animal was infected with strongylidae it was thought that the colic might be thrombo-embolic and brought about by casting of the animal. This could not be established at necropsy as no emboli were found. However, very minute emboli might have showered the blood stream producing the acute hemorrhagic cecitis and, by logging in the cerebrum, the coma.

Since the patient was anesthetized with chloral hydrate no water was given for a short period of time. It is possible that this lack of water might have caused a general dehydration of the animal which by drawing water from the colon might have produced the impaction. It is also possible that an atonic colon was responsible for the impaction. The exact cause of the atony would be hard to establish unless one would incriminate the anesthesia. This would almost be unlikely as chloral hydrate is not a smooth muscle depressant. In any case, since the animal had an abundance of feed in the digestive tract, perhaps purging the patient prior to anesthesia might have been desirable. Since no cultures were made one should not exclude a septicemia as a possible cause of death.

This case is an excellent example of the dangers attending surgical procedures upon animals that are devitalized from any cause. Treatment to remove the gastro-intestinal parasites, followed by several weeks of good feeding and tonics might have prevented this fatality. This was suggested to the owner when the horse was brought to the clinic, but he was anxious to have the horse fired as soon as possible so training could be started.

—V. D. Ladwig, fall '43

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Encephalitis in the Silver Fox.

To the silver fox industry, encephalitis is a disease of great importance. It seems to occur only in foxes raised in captivity and is epizootic in character. In the fall and winter months the foxes