
CLINICAL MEDICINE

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Canine Spondylitis. An eight-year-old yellow Labrador was referred to the Iowa State University Veterinary Clinic on September 24, 1961, with a history of posterior asthenia and incoordination. Chronic nephritis had been diagnosed a month previously and since that time the dog had become progressively weaker and wobbled considerably. Occasionally, he would lie and howl.

Blood, fecal, and urine samples were obtained and analyzed. The blood examination revealed: hemoglobin 15.08 grams per 100 cc, hematocrit 40%, white blood cells 11,600 per mm³, with 1000 eosinophils, 6600 segmented neutrophils, 2200 band cells, 400 monocytes, and 1400 lymphocytes. The blood urea was 16 mg%. The fecal sample was negative for parasite ova, but positive for pancreatic enzyme activity. The urine sample revealed a specific gravity of 1.045, pH 6.5, albumin 100 mg., and negative for sugar. The urinary sediment contained triple phosphate crystals. The laboratory work indicated that the chronic nephritis was compensated for at this time.

Radiographs of a ventral-dorsal view were taken and revealed an old injury in the region of the posterior nine thoracic vertebrae. Arthritic changes were evident and spondylitis was diagnosed.

One week following admission, this dog began passing blood at the termination of urination. Another urine sample was obtained by catheterization and analyzed. It revealed a specific gravity of 1.020, pH 7, albumin 30 mg., and was negative for sugar and whole blood. The blood passed was believed to have originated in the urinary bladder, due to retention following interference with innervation, prob-

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ably in the region of the thoracic vertebrae. A urinary antiseptic was administered orally twice daily for three days. The urine became clear and no blood was noted thereafter.

When the dog was exercised, it became incoordinated and trembled, particularly in the right foreleg. Also, he was reluctant to move about or climb stairs. This behavior was believed to be due to the pain from the area of the spondylitis. Aspirin was administered orally, 5 grains three times daily, in an attempt to relieve this pain. The dog was also confined to a cage, with limited exercise in the cage room. These procedures yielded good results. As

long as the exercise was limited, the incoordination and trembling were not evident.

The patient was released on October 14, 1961, with the recommendation that the owner restrict the dog's activity and give aspirin as needed for pain. If the condition became much worse, the owner was instructed to return the dog to his veterinarian for cortisone treatment.

James K. Burt '62

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Fulminating Streptococcus Infection in Swine.

On August 2, 1961, a call was received from a client who reported that his 140 lb. market hogs were sick. Upon arrival at the client's farm, two dead pigs were found. Several of the rest of the herd of 94 animals were noticeably depressed. Eighty per cent of the herd, including the two dead pigs, showed signs of cervical abscesses. Upon post mortem examination encapsulated abscesses, containing yellowish creamy exudate, were found within the soft tissues of the ventral cervical region. Other post mortem lesions included a hyperemic intestinal tract and greatly enlarged kidneys (3 times normal size) which seemed to be infiltrated with multiple abscesses. Tissues, exudate, and citrated blood were obtained for laboratory studies by a commercial laboratory.

Laboratory results showed that the hemogram of the citrated blood was 76,200 total white blood cells; 7,200,000 total erythrocytes; 9.8 grams hemoglobin per 100 ml., and a packed cell volume of 33 per cent. The differential count showed 82 neutrophils and 18 lymphocytes. A *Streptococcus* sp. was recovered from the exudate.

Histologic preparations for microscopic study included sections of kidney, renal lymph node, liver and spleen. The kidneys showed a fulminating suppurative reaction centered mainly around the pelvis and extending into the interstitial spaces of the parenchyma. The renal lymph node showed diffuse edema within the sinusoids. No other significant microscopic lesions were detected.

Treatment consisted of two 210,000

unit intramuscular injections of Penicillin at 48 hour intervals. Organic iodide was administered orally by way of the drinking water. Surgical drainage of the most prominent abscesses was periodically accomplished. A total of eight hogs died from this herd of ninety-four for a mortality rate of 8.5 per cent. The morbidity rate, determined by the number showing abscesses, was eighty per cent.

Septicemia of swine due to *Streptococcus* sp. is not an uncommon occurrence in baby pigs and has been reported in older swine. There are no reports, however, of cervical abscesses ever accompanying or being a part of this septicemic condition. The condition of swine jowl abscesses, which is thought to be the result of *Lancefield Group E Streptococcus* invasion, is thought to be a localized infection with virtually no associated mortality.

In this particular case, the symptoms and lesions were associated with swine jowl abscesses. This proved to confuse the diagnosis of this condition. It is this writer's opinion that *Lancefield Group E Streptococcus* had no part in the etiology of the above condition and that this septicemic condition with accompanying jowl abscesses was the result of one of the other *Streptococcus* sp.

This case occurred in the practice area of Drs. Jensen, Brown, and Dieter at Wayne, Nebraska.

Alvin Pokorny, '62

1. Collier, John Raymond, Relationships of Group E *Streptococcus* to Swine Throat Abscesses. Unpublished Ph.D. Thesis. Iowa State College Library, Ames, Iowa, 1955.

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***Anaplasma marginale* Infection in the Bovine.**

On approximately July 1st, 1961, twenty-seven Wyoming cows with calves were shipped into North Central Iowa. Upon arrival, the cows and calves were turned out to pasture. Approximately a month and a half later, one of the cows appeared rather weak, depressed and mildly icteric. She died twelve hours after onset of the symptoms. Within the next few days, several other cows began to show similar symptoms of anemia,