Rabies in a Beef Heifer

John M. Wenzler
Iowa State College

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian

Part of the Large or Food Animal and Equine Medicine Commons, and the Veterinary Infectious Diseases Commons

Recommended Citation
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol14/iss2/11

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
be difficult to ascertain. In Case No. 2, a somewhat unusual situation likewise existed in that pigs in the feed lot had been noticed to suck the affected animal prior to onset of the disease. To assume that the swine, in this case with their singular habit, can be indicated as transmitting the disease again gives rise to interesting conjecture, but would be difficult to establish.

Coming from two divergent sections of the state, these apparently spontaneous outbreaks prove the disease to be one of increasing importance. The rapid and generally fatal course, as well as the intense itching, differentiate this disease from rabies. Only rarely do affected animals become aggressive as is commonly seen in rabies.

James R. Mattison '52

2 Leptospirosis and Prostatitis in a Dog. A 5-year-old male English Pointer was presented at the Stange Memorial Clinic on Oct. 22, 1951, with a history of bloody discharge in the urine after working. The patient was quite active and alert. Bowel movements, appetite, temperature pulse, and respiration were within normal limits. The animal showed muscular build but was rather thin. The patient urinated frequently and had a purulent discharge from the prepuce.

Nephritis, prostatitis, and leptospirosis were suspected. Palpation of the abdomen showed little or no symptoms of pain or abnormal masses or displacements. Palpation of the prostate glands per rectum showed some enlargement with a slight flinching response by the dog. Examination of the coxo-femoral articulations revealed crepitations in both hip joints; especially when the patient was forced to pivot on its hind legs, but no pain or hindrance to normal movement was manifested.

The following day, about 10cc. of blood-tinged urine were obtained by means of a catheter for darkfield examination. Laboratory findings were positive for Leptospira. Microscopic fecal examination was negative for parasite ova. An x-ray picture was made of the lateral abdominal and pelvic regions. The x-ray studies revealed a suppurative prostatitis, productive coxo-femoral arthritis, and spondylitis.

One gm. of dihydro-streptomycin was administered intramuscularly in the left thigh. On Oct. 25, 1951, a urine sample was presented for bacteriological culture and revealed a pure culture of *Staphylococcus aureus*. The treatment was consequently changed to penicillin, consisting of 300,000 units of penicillin in oil and 400,000 units of aqueous penicillin intramuscularly. This was followed by 300,000 units of penicillin in oil daily for the next two days.

On October 28, the purulent discharge from the prepuce was almost entirely gone, and the patient was alert and active. Urine examinations showed negative results for *S. aureus* or Leptospira.

On October 30, another urine sample was presented to the laboratory and reports indicated that it was also bacteriologically negative. The patient was discharged on Nov. 11, 1951.

N. Chung '53

3 Rabies in a Beef Heifer. On Oct. 16, 1951, a 9-month-old Angus-Hereford heifer was admitted to the Stange Memorial Clinic. The only history available was that the owner had noticed nervous symptoms in the animal. A clinical diagnosis of rabies was made at this time.

The patient was able to stand but it was trembling and was weak on its legs. Water was offered but the patient promptly upset the bucket, indicating she had little control over her movements. Also, the heifer "bawled" loud and often. Her temperature the first day in the clinic was 96.5°F.

The following day, the patient was unable to get up. She had been bawling all morning and the sound was changing to a hoarse and bull-like bellow. The feces were extremely dehydrated, indicating that the patient had not drunk any water since the previous day. The temperature was 98°F.
The patient showed no improvement on the next day, and the temperature remained the same. Water was again offered but the heifer was unable to drink, although she definitely desired to. She had absolutely no control over her body movements, and she bawled intermittently with a hoarse, masculine sound.

During the next two days the patient showed no improvement. She refused all food and water. The temperature decreased to 95.4°F. The heifer was severely constipated; the hoarse, masculine bellowing and lack of control of body movements were still evident.

On Oct. 21, 1951, 6 days after entering the clinic, the patient appeared in very poor condition, and convulsive tremors were noted all over the body. Later in the day the heifer died.

![Negri bodies in a brain smear.](image)

A brain smear was made in the bacteriology laboratory and a positive diagnosis for Negri bodies was reported, thereby substantiating the clinical diagnosis. Smears of the heart, liver, spleen, and kidney were reported as negative.

The postmortem laboratory reported the following findings: (1) encephalitis, (2) catarrhal enteritis, (3) ecchymotic hemorrhages on the heart and parietal pleura, (4) hypostatic congestion in the right lung, and (5) dehydration of the rumen mass.

**Suppurative Sinusitis Following a Dehorning Operation.**

On Dec. 13, 1951, a yearling Hereford bull was admitted to the Stange Memorial Clinic for treatment with a history of having been dehorned December 1. On December 12, the owner had noticed the area around the left eye swollen and had summoned a local veterinarian, who referred the case to the clinic.

Upon admittance, the animal was greatly depressed and had a purulent exudate from both nostrils and from the dehorning area. A clinical diagnosis of suppurative sinusitis was made. The patient was given 2.5 gm. of aureomycin in the right jugular vein.

The animal succumbed on December 15. Autopsy revealed the following: (1) a very acute septicemia and toxemia, probably resulting from the sinusitis following the dehorning operation; (2) diffuse hemorrhages in the subcutaneous tissues, heart, and abdominal viscera; (3) suppurative sinusitis of the left frontal sinus. (4) blood-tinged, edematous cellulitis along the underline of the neck; (5) a blood-tinged hydrothorax and hydropericardium, the thorax containing approximately 5 gal. of fluid; (6) a layer of gelatinous fibrin, 1 cm. in thickness, covering the left cerebral hemisphere; resulting in pressure on the brain; (7) marked hemorrhagic lymphadenitis of the cervical lymph nodes.

In view of the acuteness displayed in this case, bacteriological cultures were made. The brain, liver, spleen, heart's blood, kidney, and a swab of the pleural fluid were all negative for the presence of any pathogenic bacteria.

*Escherichia coli* was isolated from the hemorrhagic subcutaneous tissues. *Pasteurella multocida* and *Corynebacterium pyogenes* were isolated from the left frontal sinus and incriminated as the primary etiological agents.

**Gene Petersen '53**

It is recorded that epilepsy has the longest history of any disease in medical literature.