Caprine Acetonemia Complicated with Parturient Paresis

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ed into the peritoneal cavity and about the area of the hernial ring before the suturing of the ring was completed. It

was found necessary to remove some of the excess skin and the skin and fascia was then closed with a blanket suture of silk.

After Treatment

The day after the operation the skin over the operative site was noted to be distended with fluid. Drainage was provided at the most ventral portion of the hernial sac and a large quantity of serosanguineous fluid was removed. The colt appeared quite normal and nursed the mare vigorously. Considering the great possibility of peritonitis following open reduction in the equine, the filly was placed on penicillin therapy. 50,000 units of penicillin was given intramuscularly every six hours for four doses. This same dosage scheme was maintained for the succeeding ten days.

Several times it was found necessary to enlarge the wound for drainage. Routine wound treatment was employed and the operative wound soon healed.

The colt made an uneventful recovery, and did not show any symptoms indicative of latent chloroform poisoning. One interesting observation was made while the colt was convalescing. It was noted that the hair came off the colt's body in several places. Skin scrapings were negative and the etiology of this alopecia remained undetected. It was postulated that this alopecia might be a toxicity manifestation of the penicillin. The filly was discharged from the clinic 21 days after the operation.

---Jack M. Nelson, '46

Caprine Acetonemia Complicated with Parturient Paresis. A four-year-old female Togenberg goat was presented at the Stange Memorial Clinic, June 27, 1945, for observation and treatment. This goat was a heavy milk producer. Her ration consisted of grass, ground oats, and corn. At this time, ten days after parturition, a pronounced diminution of appetite and a slowing of rumination were apparent. An examination revealed a pulse of 120, normal temperature, abdominal breathing, and the animal remained in a drowsy state being unsteady on its legs. A sample of urine was collected. A test was made for acetone bodies by placing 5 cc. of urine and 1 gm. of sodium nitroprusside-ammonium sulfate mixture in a test tube and shaking until the solid material went into solution. To this was added 2 cc. of ammonium hydroxide solution. A deep purple color resulted indicating a marked presence of acetone bodies.

Initial Treatment

Considering the above findings a diagnosis of acetonemia was made and the following treatment was given: 10 grams of chloral hydrate, 6 ounces of molasses, and water sufficient to make 16 ounces of solution given as a drench. No apparent change was noted in symptomatology from this treatment. In the afternoon the goat was given 50 cc. of calcium gluconate intravenously. Marked improvement was seen in a few minutes. The animal became alert and its locomotion appeared normal.

On each of the following two mornings 8 ounces of molasses were given and complete recovery apparently had occurred. Milk flow had returned to normal and her appetite was good. On June 29 she was discharged.

Diagnosis of typical attacks of aceto-
nemia or parturient paresis generally causes little difficulty. However, this case demonstrates that the laboratory test for acetone bodies, symptomatology, and the administration of calcium gluconate was necessary for the correct diagnosis.

—Frank K. Ramsey, '46

4 Gangrenous Mastitis. A five-year-old Guernsey cow was presented at the Stange Memorial Clinic with an extensive gangrene of the udder.

The left front quarter was swollen, cold, hard to the touch and presented a bluish discoloration. The left rear and right front quarters were acutely swollen, and there was a more moderate swelling of the right rear quarter.

The owner reported that there was blood in the milk three days previous and that the swelling had rapidly spread to all four quarters. It was apparent that the milking ability of the cow had been permanently impaired, so an attempt was made to save her life.

Bacteriological Examination

Milk samples were collected aseptically from each quarter and bacteriologic examination revealed all quarters, but the left front quarter, to be free of infection. The left front quarter was infected with Staph. aureus and Clostridium welchii organisms. It was apparent by the time these organisms had been definitely identified that the infection had spread from the left front quarter to the surrounding tissue. The left front teat was amputated to provide drainage for the spreading gangrene of the left front quarter.

Surgery

The following day the cow was restrained on the table, and an area over each inguinal region was prepared for surgery by shaving and painting the area with tincture of iodine. A three inch incision was then made over the inguinal canal and the inguinal artery was located by palpation and it was then ligated with heavy silk suture material.

The inguinal artery on the opposite side was ligated in a similar fashion. Then with the aid of heavy tumor forceps, a large portion of the gangrenous tissue was dissected away. About one half of the left front quarter and a considerable portion of the two hind quarters was found to be gangrenous and was removed. After the operation 500 cc. of a 40 percent dextrose solution was administered intravenously to help override the absorption of toxic end products as well as to furnish a source of nutrition.

General wound treatment was administered post-operatively and the cow soon came back on feed. A purulent exudate