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Corynebacterium Pyogenes Infection in a Hereford Calf

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Lymphocytoma in a Cow. On March 7, 1950, the office of the ambulatory clinic was called to treat a Holstein-Friesian heifer which had considerable swelling and redness about the eyes.

Upon examination the animal was found to have what appeared to be a severe conjunctivitis. The temperature was normal and the owner stated that he had just noticed the condition. The patient was given 500 cc of 50 percent dextrose solution and 25 cc of 2 percent aqueous solution of pyribenzamine intravenously.

Nothing more was heard about the case until the night of April 3, 1950, when the ambulatory clinic was again called out to the farm. The heifer was very depressed and emaciated. The heart sounds were very weak and the rate was 100 per minute. The first heart sound was the more distinct, the second heart sound being very indistinct. Edema of the underline was very pronounced. She stood with the back arched and inspirations were very labored. Excessive salivation and drooling were noticed. An unfavorable prognosis was given. Permission was then obtained for a post-mortem examination.

The next day euthanasia was performed and post-mortem examination revealed the thoracic cavity contained excessive amounts of fluid. There were many fibrinous adhesions in the thoracic cavity. The underline was very edematous and the subcutaneous tissues were filled with fluids. The abdominal cavity was filled with fluid. When the lungs were removed a mass of tumors was found in them. A large tumorous mass was present in the mediastinal lymph glands. When the heart and the pericardial sac were exposed, a large mass of thickened tissue was seen to completely enclose the heart, which on closer examination proved to be only the thickened pericardium. The heart was quite small for the size of the animal. This may have been due to the pressure exerted upon it by the thickened pericardium. Many small tumorous masses were evident over the entire abdominal cavity.

The heart, pericardial sac, mediastinum, portions of the enlarged tumorous masses from the abdominal and thoracic cavity and the eyelids were brought to the post-mortem laboratory for further study.

Pathological study indicated that these tumors all had the characteristics of a malignant lymphocytoma.

K. Randolph and C. Pfow '50

Corynebacterium Pyogenes Infection in a Hereford Calf. A 5-weeks old hereford bull calf was admitted to the Stange Memorial Clinic on March 15, 1950, with the owner's history of enlargements on the jaws since birth.

Examination revealed a firm, circular swelling, five in. in diameter extending from the lower border of the angle of the left ramus of the mandible to the base of the left ear. The entire left masseter muscle was covered by this swelling. There were four fistulous openings in this enlargement discharging a purulent exudate. Beneath the right ramus of the mandible was a circumscribed fluctuating swelling, one and one-half in. in diameter and roughly spherical in outline.

The abscess beneath the angle of the right ramus of the mandible was surgically opened to provide drainage, and exudate samples were cultured. The
patient was given one 10 gr. capsule of methenamine tetraiodide per os daily for seven days. Bacteriologic report showed Corynebacterium pyogenes as the causative organism.

On March 20, 1950, the abscess beneath the right ramus of the mandible was reopened to establish drainage. On March 21, 1950, .5 Gm. of aureomycin hydrochloride with sodium glycinate was given i.v. and this dosage continued daily for four succeeding days. On March 26, 1950, the swelling on the left masticetic area was slightly reduced in size and less firm. On March 27, another .5 grams of aureomycin hydrochloride with sodium glycinate was given i.v.

By March 28, 1950, the exudation had ceased from both enlargements and they were much reduced in size. By April 2, 1950, the swellings were only slightly noticeable and the patient was declared ready for discharge.

R. C. Searl '51

A Suppurative Lumbar Wound in a Saddle Horse. A three year old American Saddle gelding was referred to Stange Memorial Clinic on March 11, 1950, with a suppurative wound on the back. The history indicated that a penetrating wound by a sharp pointed object had occurred about three weeks previously.

Examination revealed a small opening about one-half in. in diameter just to the left of the midline at about the eighteenth rib. Since the area was too sensitive to permit a complete examination without restraint, the horse was given 55 grams of chloral hydrate in water via the stomach tube and then placed on the operating table in left lateral recumbency. When the wound was explored with a flexible probe, a large fistulous tract was found extending from the original wound to about the distal end of the fourth transverse lumbar vertebral process.

The skin over the area involved was shaved, scrubbed with soap and water, defatted with ether, and painted with strong tincture of iodine. The area was then infiltrated with about 100 cc of 2 percent procaine hydrochloride to provide local anesthesia. After enlarging the wound, a probe was again inserted to more completely delineate the necrotic area. It was found that necrosis had penetrated to the dorsal surface of the fourth lumbar vertebral process at its lateral end. A second incision about three in. long was made dorsal to the distal end of the fourth lumbar vertebral process. As much necrotic tissue as possible was removed and a seton that had been soaked in a solution of strong tincture of iodine and glycerin, equal parts, was inserted to insure drainage. The horse was given 1,500 units of tetanus antitoxin, removed from the operating table and led to a box stall.

On the following day, suppuration was profuse; so for the next 10 days the animal was restrained in the stocks while the wound was irrigated with a 1:3000 solution of potassium permanganate and the seton changed. Towards the end of this period suppuration noticeably lessened so the use of the seton was discontinued. For about a week, the wounds were cleaned daily and a solution of strong tincture of iodine and glycerin, equal parts, was applied. Prior to his release April 4, 1950, the horse's wounds were being dusted daily with a mixture of equal parts of boric acid and airslaked lime. Suppuration was negligible and the wounds were apparently healing nicely.

The animal was discharged with a guarded prognosis since suppurative wounds in this area are often difficult to treat satisfactorily. There is the possibility of necrosis of the fascial sheaths of the muscles involved, in which case the infection will recur, or there may be a deposit of scar tissue sufficient to act as a foreign body when the animal is worked under a saddle. Either of these possibilities would render the animal valueless as a saddle horse although there is a reasonable chance that the latter condition, if it does occur, could be corrected by further surgery.

R. L. Gillespie, '51