Enucleation of a Steer's Eye

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may have served as a point of entrance for the infection.

Termination was rapid, death usually occurred four to eight hours after the first noticeable symptoms. Death was attributed to suffocation due to marked swelling of the pharyngeal region.

All animals showing no clinical symptoms were moved to a new lot and placed under observation. No new cases developed. All affected hogs were killed and burned in the infected lot.

Both anthrax and malignant edema were considered as diagnostic possibilities. In this region anthrax never has occurred, but malignant edema is fairly prevalent, especially in equines and bovines. Since no new cases developed a diagnosis of malignant edema seems justified. One could not hope to control anthrax with the measures taken in this instance.

—R. L. Campbell, '41

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Enucleation of a Steer's Eye. A one year old Hereford steer was admitted to the Stange Memorial Clinic, Jan. 5, 1941. The left eyeball was protruding from the orbit, and there was swelling beneath the skin, above and below the eye. The history given was that the steer has been dehorned and infection had entered the frontal sinus. Such a history suggested the swelling resulting from the infection in the sinus had pushed the eyeball out of its bony orbit.

Operation

The steer was placed on the operating table. The area over the left side of the frontal sinus and around the eye was shaved, cleansed and painted with iodine. Two percent procaine was injected subcutaneously as a local anesthetic. A trephine opening was made into the anterior part of the frontal sinus about two inches from the median line. Gas escaped from the opening, showing that putrefaction was present. The swelling just above the eye was opened and proved to be an abscess containing foul smelling pus. On probing into this opening, several small bone fragments were discovered and removed. The finding of these bone fragments along with the abscessation indicated that a severe blow over the eye, instead of infection in the sinus, had caused the eyeball to protrude. A bipp pack (bismuth subnitrate—2 parts, iodoform—1 part, liquid petrolatum—15 parts) was placed into the abscess opening. The eye was washed with a two percent boric acid solution, and merthiolate ointment applied. A pack saturated with two percent boric acid solution was bandaged over the eye and the animal returned to the stall.

The post operative treatment consisted of irrigating the frontal sinus and the abscess opening with potassium permanganate solution (1:2000), and the placing of a sterile normal-saline pack over the eye each day. Sulfanilamide 2/3 b.i.d. was given each day. The temperature reached a high of 104° four days after the operation. A few days later, another opening was made below the eye, in order to drain a small abscess.

It was known from the beginning that the eye would have to be enucleated, but this could not be done until the acute inflammatory processes involving the eye and surrounding structures had receded. Ten days after the first operation, the steer was again placed on the table. The area around the eye was shaved, cleansed and painted with iodine. Two percent procaine was injected subcutaneously into the lid margin and deeply around the optic nerve. The eyeball was protruding to such an extent that the lids could not be closed. A silk suture uniting the lid margins was placed near each canthus, leaving ample length with which to exert traction. The skin was incised all around the eye about one fourth of an inch from the margin of the lids. With careful dissection, the conjunctiva was separated from the surrounding tissue down to its attachment on the bony orbit, where it was cut free. No part of the conjunctiva or tarsal glands was left in, because healing would be retarded due to secretions from these structures. While applying
traction to the eyeball by means of the
sutures in the lids, a pair of curved scissors were used to cut the eye muscles and optic nerve. The eyeball was thus completely freed from its attachment to the bony orbit. A few pieces of bone were found on probing the upper part of the wound.

The skin was brought into apposition two-thirds of the way over the cavity, using continuous silk sutures. The cavity was then packed with gauze to which bipp paste had been applied. The skin was then sutured in the same manner the rest of the way over the cavity.

The next day, the pack was removed, the opening flushed with potassium permanganate (1-3000), and liquid bipp injected into the wound cavity. The rest of the treatment was the same as before the enucleation. The steer continued in good condition all through the treatment, and on Jan. 23, 1941, was released from the clinic. The eye cavity was almost completely filled with scar tissue, and the sinus openings had closed.

—C. W. Anderson, ’41

According to estimates of the American Institute of Meat Packers, pork production for the month of Nov. 1940, was the largest for any corresponding month in the history of the packing industry. The estimates placed the total 16 percent above that for the previous month (October) and 19 percent above production for Nov. 1939.

The American farmer has an obligation to himself and to the world, to conserve and protect his livestock at this time, and the veterinary profession has a similar obligation in this national conservation program.

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