Osteomyelitis in Equine

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Recommended Citation
Lewis, R. Vaughn (1944) "Osteomyelitis in Equine," Iowa State University Veterinarian: Vol. 7 : Iss. 2 , Article 12.
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol7/iss2/12

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The symptoms of prostatitis usually develop gradually. Painful defecation and micturation appear during the early stages of the disease. The reason for these symptoms is the enlargement of the prostate gland. Although frequent attempts at micturation will be evident, only small quantities of urine will be voided. There may also be complete suppression of the urine. The bladder can be drained upon passage of a catheter. If severe swelling is present it may not be possible to pass the catheter. If this should happen, a trochar could be introduced into the bladder through the abdominal wall. The gland may be palpated per rectum with the gloved index finger. The temperature of the individual is more or less irregular.

A Specific Case

On August 8, 1944, a five-year-old male Doberman Pinscher dog was brought to the Stange Memorial Clinic. It was reported that the dog had difficulty in urination and in defecation and castor oil was administered to alleviate the latter. He had been drooling saliva and was depressed. He also was beginning to show emaciation.

Clinical examination showed that the prostate gland was greatly enlarged, which would explain the bladder being engorged with urine.

The next morning the dog had a diarrhea which probably resulted from the castor oil given by the owner. The dog was catheterized and a urine analysis was run. This analysis was found not to have any abnormal findings except the specific gravity of 1.015, which is slightly low.

On the fourth day the dog was still unable to micturate. After catheterization was finished, the gland was palpated per rectum and was found not to have receded materially. Neoprontosil therapy consisting of 15 cc. injected intramuscularly in the gluteal region was instigated and continued for the next eight days.

The dog showed a temperature of 105.4° F. on the seventh day. The dog was catheterized again, but only a small amount of urine was obtained. This indicated that the dog had been urinating voluntarily. By means of rectal palpation the swelling of the prostate gland was found to be receding, but was still painful.

On the tenth day the temperature had receded to 102.0° F. The dog’s general condition was improved to such an extent that he was exercised. He was observed for the next several days and found to be progressing normally and was discharged on the first of September.

The dog was again entered into the clinic on September 15. Upon examination, he was found to be suffering from a bilateral pneumonia. The condition was such that euthanasia was indicated.

Autopsy the following morning revealed extensive pneumonia which involved all lobes of the lungs. The heart was dilated. An orchitis was present with one testicle showing abscess formation. The prostate gland, once enlarged, was now normal in size.

—James Arnold, '45

Osteomyelitis in Equine. On August 1, 1943, a five-year-old American Saddle Horse was presented at the Stange Memorial Clinic. The history on the case was that the patient had been kicked two weeks previously. Upon examination, a slight wound was found just below the knee on the right front leg. An X-ray examination indicated a defect in the bone in the area of the injury. A mercury bichloride (1:1000) pack was bandaged over the wound and left in place for three days. At this time the mercury bichloride pack was replaced by a BIPP (bismuth subnitrate 1, iodoform 2, and liquid petroleum 18) pack.

On August 7, a basal narcotic of chloral hydrate (one and one-half ounces) was administered via stomach tube. The patient was placed on the operating table and 1500 units of tetanus antitoxin were given intramuscularly in the neck. The operative area was cleaned and shaved, and tincture of iodine was applied.

The operative area was infiltrated with 2 per cent procaine solution as a local anesthetic and an incision was made down to the bone. A small sequestrum was re-
moved and a small fistulous tract was found that entered the medullary cavity of the metacarpus. This tract was curetted and a liquid BIPP pack was placed over the incision. The case was diagnosed as osteomyelitis. A very unfavorable prognosis was given because of the fact that the medullary cavity was open and permanent recovery was unlikely.

The BIPP pack treatment was continued until August 12. A culture was then made of the infected bone and Staphylococccic and Streptococcic organisms were found to be present. The BIPP pack treatment was discontinued and a bandage saturated with penicillin (135 Oxford units per cc.) that was furnished by the Department of Hygiene was applied. The penicillin treatment was continued for five days at which time another bacteriological examination revealed only Staphylococci to be present. This indicated that the Streptococci were susceptible to the penicillin while the Staphylococci were resistant. In addition to this, before penicillin treatment was attempted a large amount of hemorrhagic-serous exudate was present and this was reduced a great deal during the course of penicillin therapy.

Improvement of the patient was quite slow; however, it had recovered sufficiently to be discharged on September 13. The owner was contacted November 15 and he reported that the patient appeared to have completely recovered from the osteomyelitis.

Use of Penicillin

At present penicillin has not been used to any great extent for treatment of cases due to the limited supply. A small amount presented at the Stange Memorial Clinic of penicillin has been prepared for clinical use by the Department of Hygiene. In this case of osteomyelitis, penicillin proved to be of definite value due to its bactericidal action against the Streptococcic organisms.

—R. Vaughn Lewis, '45

4 Metorrhagia in the Bitch. Severe post partem hemorrhage is practically confined to the cow and mare, yet occasionally our small animals are victims of severe hemorrhage after whelping. This hemorrhage has the possibility of two origins; it may be placental, as a result of detachment of the chorionic membranes from the maternal tissues, or it may be traumatic in origin. The former was probably the case of a Boston bitch that was presented to the Stange Memorial Clinic.

On July 18, 1944, a one and one-half-year-old Boston bitch whelped five apparently normal puppies. The parturition was prolonged, but otherwise normal. The bitch and puppies were progressing nicely until two days later when she began hemorrhaging from the uterus and refusing all food.

By the next day, when the dog was presented to the Clinic, it was showing signs of severe anemia and general prostration. The mucous membranes of the mouth and eyes were very bleached, and the dog had become greatly depressed. A blood-stained mucus discharged constantly from the vulva.

TREATMENT

In an attempt to contract the uterus and thus stop the flow of blood, 1/320 gr. of ergotrate was administered per os. This treatment was continued for three days along with thromboplastin injections, which was 10 cc. the first day and 5 cc. each of the five succeeding days. A blood transfusion was attempted on the fourth day. Only 75 cc. of citrated blood were given when she started to show symptoms of shock, so the treatment was abandoned. Because of the dog's weakness all but one puppy was taken from her until she regained sufficient strength to nurse them.

The ergotrate and thromboplastin therapy was continued with additional agents containing vitamin K for symptomatic therapy. Blood-stained mucus continued to come from the uterus until the fourteenth day, when the visible mucous membranes began to improve in color and lactation increased. In the course of a few days the dog made a satisfactory recovery and was dismissed from the Clinic.

The diagnosis of this condition seems to involve the composition of the blood. Evidently the coagulating thromboplastins of