

1961

Sesamoid Fracture in a Race Horse

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Recommended Citation

Hein, Dale (1961) "Sesamoid Fracture in a Race Horse," *Iowa State University Veterinarian*: Vol. 23 : Iss. 1 , Article 6.

Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol23/iss1/6

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CLINICAL MEDICINE

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Sesamoid Fracture In A Race Horse. Fractures of one of the sesamoid bones is often the cause of lameness in race horses. These fractures may occur due to a violent strain or may result from a traumatism. Usually it occurs when the animal is traveling at a fast pace causing unusual movement of the fetlock joint. When a fractured sesamoid occurs the animal bears very little or no weight on the limb. Swelling and possibly some crepitation are noted on palpation. An accurate diagnosis can usually be made with x-ray examination.

The following is a case report of one animal with this condition at Stange Veterinary Clinic.

On September 20, 1960, a six year old thoroughbred stallion was admitted to the clinic with a history of lameness of the right front leg after work-outs. The condition had existed for 16 months. Close examination revealed a slight enlargement of the area around the fetlock joint, and



Radiographs of the sesamoid bones in the horse. Before surgery (left) after surgery (right).

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skin lesions which indicated the animal had been fired previously. Flexion of the fetlock joint was approximately 50% of normal.

A lateral-medial radiograph revealed a fracture of the medial proximal sesamoid bone. There was also a considerable amount of exostosis on the proximal end of the first phalanx and the distal end of the third metacarpal bone. Since the animal had been fired previously, it was decided to attempt surgical removal of the bone chip.

On September 22, 1960, the right fore-leg was clipped and a mercury bichloride pack (1:1000) was applied to the leg. On the following day, the horse was given 5 cc of chlorpromazine hydrochloride intravenously, followed by 40 cc of Relaxin (Pitman-Moore). The animal was then placed on the table and the mercury bichloride pack was removed. A six inch incision was made on the medial side of the leg just over and slightly anterior to the fetlock joint. The incision was deepened through the subcutaneous tissue until the digital vessels were located. The vessels were moved slightly posterior and the remaining subcutaneous tissue was removed down to the joint capsule. A four inch incision was made in the joint capsule anterior to the suspensory ligament. The joint was flexed to obtain maximum space in the capsule. The fractured pieces of the sesamoid bone were removed with a curette. Those areas of exostosis which could be reached were scraped with a curette, avoiding the synovial membrane as much as possible. The joint was then flushed with sterile physiological saline. Sterile antibiotic powder was lightly dusted into the joint capsule.

The joint and subcutaneous tissue was sutured with interrupted nylon sutures. A 5% sulfathiazole ointment was applied to the incision and a sterile bandage placed over the area. This was covered with a derby bandage, placing a slight amount of tension on the leg. The horse was given 1500 units of tetanus antitoxin and also 10 cc of penicillin intramuscularly and four grams of phenylbutazone (Butazolidin-Jan-Sal) daily for 10 days. The derby bandage was reset each day and the sterile bandage was changed on alternate days. The horse was given five minutes of slow exercise daily. The animal was acutely lame for the first 48 hours following surgery, but by the end of the fourth post operative day, little if any lameness was seen. A radiograph following surgery revealed that the pieces had been removed. The prognosis was guarded. The owner was advised to rest the horse one year before resuming training.

Dale Hein '61

2

Fracture of The Tracheal Rings.

On September 24th, 1960, a five month old Angus bull was admitted to the Veterinary Clinic with the history of intermittent dyspnea. During the attacks, the calf would hold its head upward until it was in a vertical plane. The calf would frequently seek a corner in the stall and rest its head in this position. (See fig. 1)



Fig. 1. Animal with head extended attempting to relieve dyspnea before surgery.

On examination it was noted that the calf would exhibit a severe expiratory dyspnea and then suddenly appear normal. Auscultation of the lungs indicated there was no severe pneumonia. A Frick stomach tube guide was passed through the mouth and into the pharynx to determine if the dyspnea resulted from swelling in either the nasal passages or the pharynx. The by-passing of these structures offered no relief indicating an obstruction caudal to this area. Pressure on the larynx did not incite the dyspnea indicating that laryngitis was not the cause. Upon palpation of the trachea an area in the upper one-third of the cervical region felt soft and offered no resistance upon pressure. Immediately following the application of pressure the calf began gasping for air and held its head high as if "star gazing" in an attempt to prevent obstruction of the trachea. During this time open mouth breathing was exhibited. By auscultation of the trachea, a loud, dry, rasping sound could be heard over the damaged area. A tentative diagnosis of compression or