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Fracture of the Tracheal Rings

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On September 22, 1960, the right foreleg 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

fracture of the tracheal rings was made. In calf diphtheria, with a necrotic laryngitis, the head is extended and seldom is raised above the horizontal plane. It is believed that the peculiar stance assumed by this calf may be indicative of conditions of this type.

Following infiltration of the ventral part of the neck with 4% procaine, a midline incision was made posterior to the lesion. Upon exposure of the trachea two of the tracheal rings appeared to be fractured. A Dyson tracheal tube was placed in the trachea posterior to the fractured rings. This relieved the dyspnea immediately and later in the day the calf was contented and eating.

William H. Cusick '61

3 **The Repair of A Chronic Coxofemoral Luxation.** A Cocker Spaniel dog was admitted to Stange Memorial Clinic having been referred to the college clinic by a neighboring practitioner. The dog was suffering from a chronic coxofemoral luxation and the referring practitioner requested the use of a Knowles Toggle Pin.

The animal was given a preanesthetic of ½ grain of morphine subcutaneously. One half hour later the dog was anesthetized with sodium pentobarbital. An area from the dorsal midline to the stifle joint, and from the flank to the anus was clipped using an Oster clipper with a number 40 head. The skin area was throughly cleaned with pHisoHex[1], followed by three applications of zepharin chloride and alcohol. The animal was draped and the following surgical approach was used.

After a check was made to be sure the joint had not luxated, an incision was made parallel to the long axis of the femur extending from two inches dorsal, to approximately four inches distal to the greater trochanter of the femur. Using blunt dissection the muscles were separated sufficiently from the anterior face of the femur to allow palpation of the joint capsule.

Since the success of this operation is dependent upon getting the hole drilled at the correct angle, some of the land marks will be discussed. The bit should be started below the greater trochanter on the lateral smooth side of the femur. The distance below the greater trochanter should be such that with the bit at a 45° angle to the shaft of the femur, the bit will pass through the neck of the femur and come out through the fossa of the round ligament. An assistant palpating per rectum can readily determine when the bit has entered the pelvic canal and in this manner prevent perforation of the rectum or injury to the associated structures. Before the bit is removed the leg is flexed to make sure the angle is correct.

Radiograph of the pelvic area showing a coxofemoral luxation.

The hip was manuevered into the proper position; using a Kirschner drill guide, a hole was drilled through the head and neck of the femur and through the acetabulum into the pelvic canal. An assistant rendered the hip immobile and the drill bit was removed. Immediately the applicat-