

1961

The Repair of a Chronic Coxofemoral Luxation

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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 mid-line 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

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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 thoroughly cleaned with pHisoHex¹, 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 landmarks 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 maneuvered 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-

ing trochar, with a toggle pin threaded with extra heavy Supramid², was inserted into the drilled hole. The cannula was inserted through the trochar, pushing the toggle pin into the pelvic canal. With the trochar still in place, pressure was applied to the ends of the Supramid, firmly adjusting the toggle pin against the wall of the pelvis. The trochar was then removed and a medical plastic button was tied into the Supramid on the lateral surface of the shaft of the femur. The muscles were sutured into position using medium Supramid, and the skin was sutured with medium Supramid mattress sutures with just enough tension to bring the skin into apposition.

Recovery during the first week was complicated only by a temperature rise one day following surgery. Penicillin streptomycin was administered daily for three days.

This dog was very active and on the 8th day following surgery luxation of the joint again occurred. The Supramid artificial ligament had broken allowing the joint to luxate. The failure of the operation could be contributed to the over activity of the dog; there is a possibility the toggle pin had a rough surface which cut the Supramid artificial ligament; the angle of the drilled hole was wrong allowing movement of the joint which may have cut the ligament material.

The operative procedure was repeated with the exception that the joint capsule was incised. This facilitated inspection of the drilled canal with relationship to the normal joint movement. The canal was correct and another toggle pin with extra heavy Supramid suture material was inserted. The joint capsule was sutured with medium supramid and the muscles and skin were sutured as before. No attempt was made to retrieve the first toggle pin. Recovery was uneventful. One and a half months later the owner reported the dog had complete use of the joint and leg.

The Knowles Toggle Pin is a satisfactory method of repairing a chronic coxofemoral luxation. The advantages are: the head of the femur can be held securely in the acetabulum while allowing movement of

the joint; the success of complete reduction of the joint is not dependent upon the chance union of torn fibrous tissue. The occasional mechanical failures of orthopedic surgical procedures should not discourage the practitioner from attempting the operation again.

1 Winthrop Laboratories

2 Jen-Sal

Stanley J. Harless '61

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***Skunk Scent Gland Removal.** The descended skunk has emerged as a pet which can best be described as a conversational piece. When tamed adequately, it makes a pet which is safe, lovable and above all novel and exclusive

Removal of the scent glands is best performed in a skunk which is from six to eight weeks of age. The case to be described involved an animal which was estimated to be about six weeks old. The exact age was not known since the skunk was captured after being struck by a farm implement.

Anesthesia of the skunk for removal of the scent glands can safely be done by the use of ether. Nembutal may be used, however, intravenously or intrapleurally in the same dosage as used for dogs and cats. A container in which the skunk would fit comfortably was obtained, and the bottom was covered with cotton which was soaked with ether. The skunk was placed in the container and a clear plastic sheet, which allowed view of the actions of the animal, was placed over the top of the container.

When the skunk was adequately anesthetized, it was placed on the operating table. An ether nose cone was used to maintain surgical anesthesia. Doing the surgery under a protective glass cover a way from the surgery room is recommended in the event of accidental cutting of the scent gland.

The skunk was placed on its back, and one person pulled the back feet forward to allow the surgeon to have full view of the surgical area. The anal ring was everted by placing pressure with the thumbs