1949

Intramedullary Pinning of a Fracture in a Dog

Thomas J. Flynn
Iowa State College

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian
Part of the Small or Companion Animal Medicine Commons, and the Veterinary Anatomy Commons

Recommended Citation
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol11/iss2/12

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Intramedullary Pinning of a Fracture in a Dog. A 6-year-old male Chow was admitted to the Stange Memorial Clinic on December 8, 1948, with a history of having suffered an injury of the left rear leg when struck by a car seven days previously. The dog was unable to walk on that limb, which was swollen from a point below the femorotibial articulation up to the pelvic region. To facilitate examination, pentobarbital sodium was administered intravenously to effect, and the animal placed upon the table.

Fluoroscopic examination revealed a complete transverse fracture of the femur of the left hind leg at a point approximately 1 1/2 inches from the distal end. X-ray exposures, dorsal to ventral and lateral to medial, were made for permanent records.

The following morning, the dog was taken to the operating room and placed under anesthesia with pentobarbital sodium given intravenously to effect. The surgical site was clipped, shaved, defatted with ether, and sprayed with an organic mercurial skin disinfectant. Using ether to supplement the barbiturate, surgical anesthesia was produced without event.

An incision was made directly over the trochanter major of the femur, to penetrate the skin. By blunt dissection and further incisions, the dorsal surface of the trochanter was made available for palpation, and the site for drilling selected according to the shape and conformation of the bone. A sharp stainless steel pin with a three-sided short tip, was aligned parallel with the length of the femur, then driven into the medullary cavity of the bone at the selected site, and tapped downwards through it until its distal end was at a point just short of the fracture.

Previous to this time, an incision had been made through the skin and muscle with dressings. As of the time of writing this report, further treatment consists of redressing the wound daily.

Thomas J. Flynn, '50
layers lateral and dorsal to the stifle. Through this incision, the distal fractured portion was placed in apposition with the proximal end of the broken bone after considerable manipulation of the extended leg to which traction was being steadily applied. The pin was then driven through the fractured region into the medullary cavity in the distal end of the femur, thus holding the bone intact. When the surgeon was satisfied with the completeness of the union and the holding ability of the inserted pin, he cut off the excess portion of the pin still protruding from the trochanter major at the point of insertion, leaving a small length projecting from the bone.

The fascial layers of both wounds were then brought together by continuous catgut sutures, after which the skin was joined by interrupted braided silk sutures, covering the projecting pin at the initial site of incision. Sterile gauze pads were taped in place to cover the wounds, and an aluminum splint applied to the leg for additional support. The dog was returned to his kennel after prophylactic injection of 40 cc. of Anti-Canine Distemper Serum and 300,000 O.U. of procaine penicillin in oil.

Penicillin therapy was repeated the following day. At this time, zinc stearate and oxide ointment was applied to the splint abrasions on the injured leg. The dog appeared to be in good condition and was friendly when handled.

The operative wounds continued to heal uneventfully and the patient made satisfactory progress. The splints and sutures were removed on December 17.

On Jan. 4, 1949, the patient was brought into the operating room and the area over the trochanter major made ready for surgery. A skin incision was made over the end of the projecting pin, exposing it to view. The pin was then grasped with forceps and pulled from the marrow cavity of the femur. The skin incision was covered with collodion, and the dog returned to his cage.

Within five days, the dog began making gradual use of the left rear limb. By Jan. 17, he was walking about and placing more of his weight on the affected limb. Recovery continued steadily from that time.

The patient was discharged from the clinic on Jan. 22, and no further reports on his condition have been received.

Thomas J. Flynn, '50

Injury and Hematocyst of the Penis. September 29, 1948, a 2-year-old Stanradbred stallion was admitted to Stange Memorial Clinic for treatment of an injury of the penis which had occurred the night before. The history, as offered by the owner and the groom, indicated the stallion had escaped from his box stall into a runway in the barn. A Shetland pony was kept in a box stall near that of the stallion. The groom stated that the pony had remained within the stall throughout the night and therefore could not have caused the injury. The clinicians at the clinic were of the opinion that the stallion had become excited while free and running, and erection had occurred. The constant pummeling of the erected penis against the hocks while running was probably the cause of the injury to the penis.

The patient was examined and a diagnosis made of a hematocyst of the penis. Profuse swelling of the penis and prepuce was evident. The hematocyst was located at the midpoint on the right dorsal portion of the penis. The lesion was located superficially between the tunica albuginea and the epithelium of the penis. Edema of the underline was also present. The patient exhibited pain when walking, keeping the rear legs as far apart as possible to prevent irritation to the swollen penis.

The morning of admittance the patient’s pasterns were wrapped with cotton and gauze bandages to prevent injury to these regions when restrained on the operating table. He was then led into the stocks, given 50 Gms. of chloral hydrate in 2,000 cc. of warm water via the stomach tube to produce narcosis. The patient was then

The Veterinary Student