With the diagnosis completed and the anesthesia still in effect, reduction was started. The procedure of choice was determined by the pathology present. In this case the patient was placed in a lateral recumbent position with the injured side up. An assistant steadied the pelvis of the animal while the operator applied gradual tension toward the extremity of the leg. Traction was applied to the injured member and simultaneously pressure was applied to the medial side of the leg. In this way the head of the femur was placed dorsal to the ileum, that is, a superior-anterior luxation was effected. From this more common position the lower part of the extremity was grasped with the right hand, and the left thumb was placed over the trochanter major. Gradual tension was applied on the extremity with the leg in definite abduction. Outward rotation and tension was increased until the member was of equal length with its fellow. Then, with the tension maintained, the leg was rotated inward. The femur dropped readily into the acetabulum.

## Immobilization

The affected member was moved in several directions to ascertain that normal motion would not again cause dislocation. A yucca board splint was placed on the leg to guarantee immobility while healing. Two days later the splint was removed and the animal was allowed to use the member. The patient, making an uneventful recovery, was discharged 5 days after its entrance. At the time of discharge the animal showed no signs of malfunction.

—H. M. Atkinson, '45

**5** Inguinal-mammary Enlargement in a Dog. A 10-year-old female Fox Terrier was admitted to the Stange Memorial Clinic on June 23, 1944. The history presented was that of a growth on the mammary gland which had been slowly enlarging. The dog's general condition appeared good; however, there was an enlargement in the left inguinal and posterior region. The enlargement extended from the immediate inguinal region to within 2 cm. posterior to the umbilicus. There was some deep fluctuation indicating the presence of an abscess. A diagnosis of neoplasm of the mammary gland with abscessation was made.

On June 24, the dog was prepared for the removal of the enlargement. It was given 32.5 mg. of morphine as a basal anesthetic and 0.65 mg. of atropine sulfate to inhibit the salivary secretion. The operative area was shaved, cleaned and defatted with ether. Seventy percent alcohol was sprayed on the area as a preoperative skin antiseptic. The dog was restrained and merthiolate ointment (1-5000) was placed on the exposed nasal membranes and in the conjunctival sacs to protect them from irritation due to ether. Ether was the general anesthetic used.

### Surgical Procedure

A skin incision approximately 5 cm. long was made over the enlargement. By blunt dissection, the neoplasm and abscess were exposed. The vessels supplying the neoplasm were ligated and the removal of both followed. After the removal of the enlargement, an inguinal hernia was found. The hernia was corrected by closed reduction. No. 2 plain catgut was used to close the inguinal The skin was closed with interring. rupted sutures of No. 3 nylon suture material. A continuous suture then followed to bring the wound edges in closer apposition. Sterile talcum was dusted on the wound and this in turn was covered by sterile sponges and a roller bandage.

Further treatment consisted of alternate removal of the skin sutures, dusting with sulfanilamide powder and daily replacement of the roller bandage. The last suture was removed June 30 when recovery seemed quite apparent. However, during the night the skin wound and inguinal ring broke open producing an inguinal hernia which was found protruding from the wound the following morning.

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The area was immediately cleaned with soap and water, shaved and defatted with ether. Seventy percent ethyl alcohol was sprayed on the area as a pre-operative skin antiseptic. The dog was restrained and anesthetized with ether. The wound was cleaned and the herniated mass of tissue was replaced. With some difficulty, due to its friable condition, the inguinal ring was closed with No. 4 plain catgut. The skin was closed with No. 3 nylon suture material, leaving a small posterior opening for drainage. The wound was dusted with sterile talcum, covered with 3 sterile sponges and a roller bandage applied.

## **Points of Interest**

The skin around the wound edges became necrotic and the sutures pulled loose July 2. It was then decided to allow the wound to heal by granulation. Sulfanilamide powder was dusted on daily and roller bandages were used on the area until July 8. Apparently complete recovery was realized.

There are several points of interest in this case. Given the problem of determining the cause of an inguinal and mammary enlargement, the diagnostician is presented with several possibilities. The most important are neoplasms, hernias, abscesses, mastitis, pseudocyesis and local edema due to injury. None of these conditions are connected in any way to another and yet in this case, the first three of the aforementioned were found. This seems unusual since the dog seemed to be suffering no ill effects from any of the conditions.

### **Guarded Prognosis**

Another point emphasized is that the prognosis of a hernia should always be guarded. This was seen when the hernia ring opened the second time. The prognosis of the second hernia reduction was even more guarded due to the friable condition of the ring. There is always the possibility of a hernia recurring due to too large a ring, poor suture material or mechanical influences.

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A third point is the demonstration of the fact that to have a wound heal by primary union, the wound edges must be in immediate and constant apposition. However, in this case, as in most instances when this rule is violated, healing by granulation substituted very well.

-H. D. McCreedy, '45

# **BOOK REVIEW**

Manual of Fractures. C. M. Shaar, M.D.,
F.A.C.S. Captain, Medical Corps, United
State Navy, and Frank P. Kreuz, Jr.,
M.D., F.A.C.S. Lieutenant Commander,
Medical Corps, United States Navy. 300
pages. Board. 148 illustrations. W. B.
Saunders Co., Philadelphia. 1943. Price
\$2.00.

This book has arisen from the need for a text explaining the treatment of fractures where previous methods have proved impractical. It is in itself a complete treatise on the principles of handling of fractures, with special attention given the application of external fixation.

The rules which must be followed in treatment of any fracture are discussed. A detailed description of the Stader reduction and fixation splint together with the principles for its application is given together with the errors and difficulties encountered in its use. The complete manner with which the book treats this new method of fracture healing is exemplified in the way its use is explained for each bone and type of fracture in which fixation may be applied. The book is profusely illustrated and written in a simple, easily understood form.

The book is developed for human surgeons, chiefly those concerned with healing of fractures resulting from conditions of battle. However, its employment by the progressive veterinarian is indicated and it should be a welcome addition to the bookshelf of the practitioner who is searching for the answer to treatment of fractures which previously have been considered hopeless.

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