area. Injections of three-fourths cc. of the mixture was then made at points approximately one inch apart over the entire area that was affected. In the center of the area the injections were made right down on the scapula. A total of 15 cc. of the oil of turpentine-chloroform mixture was used in this injection. To insure that the proper amount was injected at each point the lock nut on the syringe was used. If too much of the mixture is injected at one point a sterile abscess very often results which requires drainage and considerable delay in healing is sometimes encountered.

The colt showed very little evidence of pain due to the injections; however, he was tied quite close and observed for a few hours to prevent injury should much pain occur. The following day the area showed considerable swelling, which slowly diminished.

Later Examination

Upon examination two weeks later it was found that the muscles had not completely returned to normal so it was decided that a second treatment would be necessary. The same method was used this time as previously with the exception that a total of 10 cc. of the mixture was needed. Following this series of injections the swelling went down gradually and the muscles appeared to be filled out to normal.

The colt was then discharged from the clinic. The owner was instructed to give the patient plenty of exercise and turn him out on green pasture. The owner reported recently that the formerly atrophied area had remained filled.

-R. Vaughn Lewis, '45

Renal Tumor of a Dog. Runnels states that adenocarcinoma in the dog usually involves mammary, thyroid, prostate or liver glandular tissue. This case report of an adenocarcinoma is of interest from its rather unusual involvement of the renal glandular tissue. The therapy employed to control the resultant peritonitis which developed fol-

lowing surgical intervention is also of interest.

The patient, an 8-year-old Springer Spaniel, was presented to the Stange Memorial Clinic with a history of refusing most of its feed for 6 weeks with frequent vomition. The bowel movement was normal but scant. Upon examination the patient was noted to be sensitive in the left hypogastric region and upon further palpation an enlargement could be felt in that area. Fluorescopic examination demonstrated an enlargement about the size of a baseball and slightly elongated in the region of the left kidney.

Anesthesia

The dog was administered 1 gr. of morphine sulfate and one-fiftieth gr. of atropine sulfate subcutaneously and surgical anesthesia was completed with ether. A large area was shaved, defatted with ether, and painted with tincture of iodine. The surgical incision, 10 cm. in length, was made on the median line. Exploration revealed an enlarged left kidney. The kidney was freed from its attachment and the renal vessels and left ureter ligated with No. 2 plain cat gut to control the hemorrhage. The renal artery was greatly enlarged and the entire mass markedly congested. The tumorous mass was then removed and the peritoneum was sutured with No. 2 plain cat gut. The muscle and skin was closed with 6 No. 3 nylon sutures and a continuous suture of No. 2 plain cat gut was placed in the skin to bring the edges into perfect apposition. A tight roller bandage was applied to support the abdomen and to help control hemorrhage.

A portion of the enlarged mass was fixed in alcohol and sectioned using routine paraffin methods and staining with hematoxylin and eosin. Microscopic examination revealed the mass to be an adenocarcinoma.

The dog was again anesthesized 6 days later and the inflamed prolapsed omentum and necrotic subcutaneous fat removed. The muscle layers were then sutured by No. 4 chromic cat gut. Bipp paste was applied to the wound and a many-tailed bandage applied around the abdomen.

Two days after the second operation,

100,000 units of penicillin was injected intravenously following a temperature rise up to 104.4° F. and also 7 cc. of neoprontosil was administered intramuscularly. The administration of neoprontosil was abandoned because the entire excretion of the drug occurs by way of the kidneys. Thirty gms. of dextrose and 50,000 units of penicillin in 15 cc. of sterile physiological saline was given intravenously b. i. d. for three days.

Fifteen gms. of 50 per cent dextrose solution was administered on the second and third days. A Bipp paste pack was maintained on the wound while the dog was hospitalized. The penicillin was successful in controlling the localized peritonitis that developed and was not toxic in spite of the diminished renal capacity to handle the excretion of the drug. While in the clinic the dog showed consistent oligouria. Supportive treatment consisted of 3 oz. of liquid peptone and 4 oz. of kaopectate administered per os daily.

The dog was discharged 19 days after the initial operation and died 3 days after it went home. Death resulted from uremic poisoning, as the remaining kidney never was able to completely take over the physiological level of urinary excretion.

-Jack M. Nelson, '46

On February 27, 1945, a 4-year-old mare was presented to the Stange Memorial Clinic. A swelling on the right side of the face had been noted the pre-

Dental Involvements in the Equine.

side of the face had been noted the previous day. The tongue was swollen and she was unable to open her mouth. The temperature was normal and the general condition good.

condition good.

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Upon examination it was found that the swelling was an abscess which pointed into the intermandibular space. An incision was made and the abscess allowed to drain. Hot packs were applied to the right cheek for a short while each day for three days before a speculum could be inserted and the teeth examined.

A rather unusual situation was found in that no alveolar periostitis was discernable by palpation. Since this type of abscess is usually due to an infected tooth it was decided to repell the fourth lower cheek tooth. The basis for such action is that this is the oldest tooth in the mouth and most often the cause of such trouble. The tooth was repelled after making a trephine opening along the lower border of the mandible. Dental packs soaked in Bipp were put in place and these were changed regularly. There was marked evidence of periositis completely surrounding the root of the tooth.

Repelled Tooth

A week after the tooth was repelled some pus was liberated upon digital palpation in the cavity. It was believed that this was due to spicules of bone which were ready to come out. The exudate increased after this and the horse was placed on the table for a more complete examination. At this time the third lower tooth was found to be infected also and it was repelled and the cavity curetted. Routine treatment was followed for ten days after which a considerable amount of granulation tissue lined the cavity. A plug of dental wax was inserted and the horse was discharged with this in place.

-John L. Innes, '45

Atresia of Anus and rectum and Recto-Vaginal Fistula in a Calf. On August 22, 1940 a pure bred 3-year-old Holstein heifer calf was presented at the Stange Memorial Clinic. The calf was only one day old and she had been straining and bawling since birth. Examination revealed a fistula one-half inch in diameter between the rectum and vagina located about 2 inches anterior to the vulva.

Chloral Hydrate

Choral hydrate, $1\frac{1}{2}$ oz. was given by the stomach tube. Ten cc. of 2 per cent procaine was infiltrated. A circular incision was made about 1 inch above the upper commissure of the of the vulva. Meconium was flushed out with 2 per cent sodium bicarbonate. The skin of the anus was sutured with No. 12 black silk sutures.

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