

watery solution of fecal material from the pointer. A stool from a normal dog was obtained for comparison and subjected to similar conditions as above. Fifteen minutes later the two strips of radiographic paper were examined. The strip that was in contact with the normal stool was transparent as the trypsin in it had digested the gelatin coating normally present on radiographic paper. The strip that had been in contact with the Pointer's stool was still translucent as little, if any, of the gelatin coating had been digested. It was thus confirmed that the Pointer lacked pancreatic enzymes. It is taken for granted that the other pancreatic enzymes are also lacking.

A urine sample was obtained by catheterization and checked for sugar as diabetes melitus is occasionally reported associated with chronic pancreatitis. The urine was negative for sugar and albumin. It had a pH₆ and was within the normal range of the methylene blue liver function test.

Medication consisted of two Panteric tablets† and a teaspoon of M. W. R. 352‡ with each feeding (b.i.d.). For the first 4 days Hill's commercial dog food was fed. Although the stool was improving in color it was still very coarse. The diet was changed to Hill's prescription diet i/d as it was felt a blander diet was in order. The last two days of hospitalization Fromm's dry dog meal was mixed with the i/d in an effort to have the dog on a more normal diet at discharge.

Gradual improvement in the color and consistency of the stool was seen from day to day. On April 6, 4 cc. of n-butyl chloride were administered in an effort to reduce the hookworm infestation which doubtlessly was contributing to the looseness of the stool. On April 8 the dog was discharged. On this day the stool was of normal color and near normal con-

sistency. Panteric tablets were dispensed to the client along with enough n-butyl chloride to worm the dog twice in the future. The client was instructed to feed the dog twice daily and to administer Panteric tablets with each feeding. That it might be necessary to increase the number of Panteric tablets to maintain a normal stool was explained to the owner.

On April 20, communication with the client disclosed the dog to be gaining weight rapidly, and that the bloated appearance had disappeared shortly after the second worming. Occasional loose and light colored stools were reported. It was suggested that the client increase the number of Panteric tablets per feeding.

Bruce Gradous, '55

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Pyelonephritis in a Cow. On Feb. 18, 1954, a 7-year-old Holstein cow was admitted to the Stange Memorial Clinic. Previous history indicated that this cow had undergone treatment by a practicing veterinarian for bloody urine. On Jan. 4, 1954, the cow was given a series of penicillin injections which seemed to clear up the bloody urine. However, within a week the urine was again bloody and penicillin treatment was again tried. Because this did not effect a permanent cure the veterinarian suggested bringing the cow to the clinic.

Examination of the cow revealed that the urine was a port-wine color; the temperature, 102.0°F.; appetite, good; bowels, normal; she stood with her back slightly humped. Rectal examination revealed an inflamed and enlarged left ureter. A urine sample was sent to the bacteriology laboratory for cultures. An examination of the blood revealed the following: total red cell count, 9,100,000; total white cell count, 7,280; differential 1,000 eosinophils; 1,400 stabs; 1,500 segments; 200 monocytes; and 3,200 lymphocytes.

A tentative diagnosis of pyelonephritis caused by *Corynebacterium renale* was made.

A course of treatment using penicillin

†. Panteric compound tablets are marketed by Parke, Davis and Co. 10 gr. Pancreatin U.S.P., 1½ gr. Ext. of Ox Gall U.S.P.

‡. M.W.R.-352 is a Jen-Sal product containing methionine, thiamine, and riboflavin in an easily assimilated carbohydrate base that is reputed to restore intestinal absorption and dehydrogenation of fats in depancreatized dogs.

was outlined. The cow received three million units of penicillin in oil intramuscularly on Feb. 19, 20, 22, 24, and 26. Throughout the course of the treatment the temperature remained normal. The cow ate normally and rumen motility was normal. On February 22 the urine no longer showed any discoloration.

The laboratory report confirmed the diagnosis of the presence of *C. renale* on Feb. 26, 1954.

Recovery was uneventful, however, the penicillin was still given after the bloody urine was cleared up. The cow was discharged on Feb. 28, 1954.

In cases such as this it is frequently found that there is a recurrence of the condition if penicillin is discontinued as soon as the urine is blood-free. The case indicates that continuation of therapy for at least 10 days will aid in combating *C. renale* infections.

Murray Fowler, '55

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Vitamin A Deficiency In An Angus Steer. A black Angus steer was admitted to the Stange Memorial Clinic on March 3, 1954 with a history of weight loss. The animal had lost 200-300 pounds in five months while on full feed. There was swelling of the brisket and the front legs, anorexia and considerable irritability upon handling. The temperature was normal and the animal showed no visible lesions. It was one of five animals in a herd showing similar symptoms. The ration consisted of clover and timothy hay cut the previous June, last season's ground whole corn, a commercial supplement and a salt and mineral mixture. A blood sample was citrated and sent to the chemistry department for vitamin A determination. The next day, March 6, the following results were returned: Vitamin A, 21.4 μ gm. per 100 cc. and carotene, 37.7 μ gm. per 100 cc. The normal value for vitamin A is 35 μ gm. per 100 cc. and the normal carotene value is 200 μ gm. per 100 cc. The reason for this deficiency while on the ration described is unknown. However, this con-

dition has been diagnosed in a number of herds in a geographical area corresponding to the drouth area of 1953.

The patient was given a vitamin A and D supplement for six days and was discharged on March 11, 1954.

Jack Crawley, '55

Carlin is the old name for the pug dog, but it is now obsolete.

Rabies killed 52 people in Japan during 1950. There were 867 cases in dogs.

Slow intravenous injection of the equivalent of three-eighths unit of curare per pound of body weight for dogs under a light plane of pentobarbital anesthesia increases the apparent depth of anesthesia and effects marked relaxation of muscle tissue.

Liver biopsies are common practice in medicine to determine the presence of carcinoma, lymphoma, and amyloidosis as well as the operability of patients in which splenorenal anastomosis is considered. Since the late war, interest in this method of diagnosis has increased. A 14-gauge needle of special design, into which a split cannula is introduced at the proper time, provides means for obtaining satisfactory material for biopsy. Drs. Brick and Horstman discuss the subject and present case reports to show the value of liver biopsies.

Asthma is derived from the Greek word *astma*, meaning to pant.

Airwick used in the puppy house is claimed to be very effective in keeping away flies and mosquitoes.