The St. Bernard at Necropsy. The dark enlargement, front and center, is the bladder. Three gallons of fluid were drained from it.

history of occasional straining and frequent scanty urination. The abdomen was greatly distended and before death the animal was quite depressed. The owner thought the animal was pregnant; however, there was no increase in mammary development. Since the animal was dead on arrival there was no clinical diagnosis made.

Post mortem examination revealed complete atony, chronic dilatation and hypertrophy of the urinary bladder which contained approximately three gallons of sanguineous urine. The bladder wall was approximately 2 mm. thick and showed diffuse hemorrhages throughout. There was a mild chronic nephritis accompanied by some symptoms of uremia. A mild myocarditis was also seen. The animal was not pregnant.

The etiology of this particular case was unknown. Urethral calculi, tumors or stricture of the urethra (acquired or congenital) could cause this condition but in this case the urethra was unobstructed, no calculi were present and there was no disturbed innervation of the bladder. An enlarged prostate or prostatic involvement may be an etiological factor in male animals. This syndrome may have been initiated by a chronic cystitis.

Keith T. Johnson, '55

4 **Chronic Pancreatitis.** On March 27, 1954, a 60-pound 6-year-old male German Shorthair Pointer was presented at the Stange Memorial Clinic with a history of blood being noticed in the stools two months previously, continuous loss of weight although the appetite was always good, occasional vomition, loose clay-colored stools, and a diet of Nutrena and tablescraps.

Physical examination revealed a thin bright active animal with a peculiar bloated appearance; palpation of the abdomen revealed nothing that would have accounted for its enlargement.

A tentative diagnosis of chronic pancreatitis was made and the animal was left at the clinic for further observation and therapy.

A fecal sample was obtained from the dog. The stool was loose, yellowish-gray, foul smelling, and contained blood clots and excessive mucus. Microscopic examination revealed *Ancylostoma caninum* ova. Part of the stool was subjected to a simple test for pancreatic enzymes (trypsin specifically). The test was conducted as follows: A small piece of undeveloped radiographic paper was inserted into a paper cup containing a

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 pH_6 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 consistency. 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. Ossasional loose and light colored stools were reported. It was suggested that the client increase the number of Panteric tablets per feeding.

Bruce Gradous, '55

†. 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 assimulated corbohydrate base that is reputed to restore intestinal absorption and dehydrogenation of fats in depancreatized dogs.

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5 **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