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Torsion of the Abomasum in the Bovine

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Intestinal Obstruction in a Dog.
On August 3, 1954, a 6-year-old female Collie was admitted to the Stange Memorial Clinic with a history of having an upset stomach for the past several days. Penicillin had been administered, but no improvement was noticed. The animal was examined and found to be extremely depressed and in a toxic condition. The conjunctiva appeared injected and the temperature was 103°F. A hard mass could be detected upon palpation of the lower abdomen on the left side.

A diagnosis of an intestinal foreign body was made and the animal was prepared for surgery. She was given 3 cc of Demerol intramuscularly as a sedative. Then 500 cc of 5 percent glucose in normal saline was administered subcutaneously, followed by 200 cc of 5 percent glucose intravenously. Due to the toxic condition of the dog a general anesthetic was not used. Instead, an epidural anesthetic of 3 cc of 4 percent procaine was administered.

The abdominal cavity was opened by a ventral mid-line incision and an obstruction was found in the ileum. The intestine was swollen with a bluish black color evident in this area. A longitudinal incision was made through the wall of the ileum through which a 2-inch piece of corn cob was removed. Observation of the affected portion of the intestine showed a return to normal color, so it was not removed. Instead, an epidural anesthetic of 3 cc of 4 percent procaine was administered.

The skin was closed with interrupted mattress sutures using 35 gauge stainless steel.

An intraperitoneal injection of 500,000 units of aqueous potassium penicillin G was given at the time of the operation and that evening 125 mg. terramycin was administered intravenously. The following day the dog was given 1 cc. escharin, 500 cc of 5 percent glucose, 125 mg. terramycin intravenously and 250 mg. achromycin orally. The 500 cc. dose of dextrose was continued for two more days.

The second day the dog drank a cupful of warm water containing some elixir of vitamin B complex. The animal was also started on a series of six daily doses of 500 mg. Poloyotic to reduce the number of intestinal microorganisms. The third day the bandage was removed; the sutures were in place and the incision appeared to be healing nicely. The dog was then placed on a milk diet.

On the fifth day the dog was fed ¼ can i/d prescription diet in addition to the 500 cc. of milk that it was already receiving. The temperature had dropped to 101.3°F. On the seventh day this ration was doubled and on the ninth day the animal was placed on full feed. The sutures were removed from the abdominal incision and the animal was sent home on August 13, 1954.

Martin Van Der Maaten, '56

Torsion of the Abomasum in the Bovine. About the middle of July, 1954, a Guernsey cow was noted to be off feed by the owner. The diagnosis, made by the local veterinarian, was a digestive disturbance. The cow responded temporarily when treated with gastric stimulants and dextrose. However, one week later, the cow again went off feed. Molasses in her feed did not stimulate the cow's appetite and milk production was cut in half. The cow was again examined by the local veterinarian on August 17, and he recommended the cow be brought to the clinic for an exploratory rumenotomy.

A rumenotomy was performed at the clinic on August 20. No hardware was discovered, but rather, a torsion of the abomasum existed. This organ had turned under and displaced itself to the left. It was so distended with gas that the reticulum was collapsed. The torsion was corrected from outside the rumen and the incision wounds were sutured. The
next day the animal was eating well. Two days later the appetite was poor and the feces were hard. Twenty cubic centimeters of fluid extract of nux vomica in a No. 10 capsule were administered orally. The next day anorexia still persisted. More nux vomica was given orally and 500 cc. dextrose were administered intravenously. That same day the bandages were removed. The incision was healing nicely. Throughout the remainder of the month of August, the same symptoms persisted—anorexia and very little bowel movement. The temperature remained normal.

On September 3, the cow was again prepared for surgery. An incision was made in the right paralumbar fossa. The abomasum was found to be displaced again. At the same time an incision was also made on the left side posterior to the last rib. Adhesions were broken down and the abomasum was returned to its normal position by gentle traction on the organ by the clinicians on both sides of the cow. The incisions were closed with No. 3 catgut sutures through the peritoneum and through the muscles and fascia. The skin incisions were closed with umbilical tape and the wounds were covered with gauze. Then 500 cc. of 23 percent calcium gluconate and 500 cc. of triple sulfa (sulfamerazine sodium, 15 g., sulfapyridine sodium, 15 g., sulfathiazole sodium, 15 g.) and 1 G. liquid phenol were administered intravenously. Three million units of penicillin were given intramuscularly. One and one-half gallons of mineral oil were given via a stomach tube. One-fourth grain of strychnine in aqueous solution was injected subcutaneously.

Unfortunately the cow could not withstand the strain of the second operation and it died on September 4, 1954. Post mortem findings showed the torsion of the abomasum had been reduced. An acute diffuse fibrinous peritonitis was found in the anterior ventral portion of the peritoneal cavity. In an interview with the clinician in charge of the case, it was suggested that had incisions been made on both the right and left sides of the cow during the first operation the case would probably have gone to a successful conclusion.

Donald G. Lyon, '56

Hematocyst of the Udder in a Cow. On July 26, 1954, a 2-year-old Holstein cow with a very large pendulous udder entered the Stange Memorial Clinic. It was noticed that the swelling had extended dorsally from the udder into the flank area of the right side. It appeared that the suspensory ligaments were also broken down.

The animal was cast in the courtyard and an area of the udder was shaved and disinfected. An exploratory puncture was made with a 14-gauge needle and blood-tinged serum exuded indicating a hematocyst. An horse trocar was then inserted into the needle hole and about 8 gallons of the liquid was allowed to spurt from the hematocyst; its size decreased accordingly. A diagnosis of hematocyst of the udder and disintegrated lateral and medial suspensory ligaments was made.

The cow was then put on the table and a 6-inch incision was made into the cavity high on the udder. At this point its walls were about 3 inches thick. The cavity extended from a voluminous area down in the udder to a diverticulum as far dorsally as the stifle joint. About 3 gallons of fibrin and serum were removed from the hematocyst. It was packed with sulfanilamide powder and 100 feet of 3-inch wide gauze pack. The cow was given 2,000 cc. saline and 500 cc. dextrose intravenously as shock symptoms had appeared. That afternoon 500 cc. dextrose and 3,500 cc. saline were given by the intravenous drip method. The animal appeared quite depressed, but her temperature was normal.

The next day the cow appeared stronger and 3,000,000 units of penicillin were given intramuscularly to counteract any developing systemic infection.

On the second day, the packs were removed and the cavity flushed with 1:1,000