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Intestinal Obstruction of the Canine

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passive hyperemia. The spleen was also greatly enlarged.

The abdominal viscera were removed from the thorax and packed in towels soaked with warm physiological saline solution. The tears in the diaphragm were sutured together using a combination of interrupted and mattress type catgut sutures. Number 00 catgut sutures were also used to attach the diaphragm to the thoracic wall. The abdominal incision was closed using interrupted catgut sutures for the peritoneum, muscle and fascia. Vetafil was used for the skin. The air from the thorax was removed by using a syringe. Artificial respiration was continued until the patient came out of anesthesia.

Postoperative care consisted of the use of a bland diet, systemic antibiotics, B-Sol® (Fort Dodge Laboratories) and physiological saline-dextrose solutions given subcutaneously.

1. Professional Veterinary Services, Miami, Florida.

---Roger Seigert, '57

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Two-headed Calf Causes Dystocia. On Jan. 26, 1957, a 3 year old Guernsey cow was brought to Stange Memorial Clinic because of dystocia. Dr. D. E. Gubser of Earlham, Iowa, had diagnosed a two-headed calf in anterior presentation causing the dystocia and recommended sending the cow to the clinic for cesarean section.

Cesarean section was performed through an 18-inch incision in the left flank. Inverted L and epidural anesthesia were used.

The calf was delivered dead. Grossly there were two heads, two necks and one body. Necropsy revealed that there were two gullets with the rest of the digestive tract single. The spinal column was double through the cervical, thoracic and lumbar regions. The sacrum was single. There were two hearts.

Therapy for the cow immediately following surgery consisted of 500 cc. of physiological saline and 500 milligrams of chlortetracycline intraperitoneally, 500 milligrams of chlortetracycline intrauterine and 2,000,000 units of penicillin and 5.0 grams of streptomycin intramuscularly. On each of the following 4 days the above dosage level of penicillin-streptomycin was given intramuscularly.

Recovery was uneventful and on Feb. 2, 1957, the cow was sent home with a good prognosis.

---Rodney Hall, '58

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Intestinal Obstruction of the Canine. The possibility of foreign bodies in the intestinal tract should be a consideration in dogs exhibiting persistent emesis. Younger dogs are more likely to ingest foreign objects due to their playful and curious attitude. The object may remain in the stomach and cause varied symptoms depending upon the degree of irritation to the gastric mucosa and the size of the object. No symptoms may be discernible or the dog may exhibit varying degrees of anorexia and vomition. If the object is small enough to pass through the pylorus it may pass on to the intestinal tracts.
tract. The foreign body may cause an obstruction in the duodenum, jejunum or ileum. The obstruction of the intestinal lumen may be partial or complete. In many cases the object may be excreted in the feces. If the object has sharp or rough surfaces it will traumatize the intestinal wall. The object, due to its size, may cause pressure on the intestinal vessels, decreasing the vascular supply leading to necrosis. If the obstruction is in the region of the duodenum vomiting will generally be frequent. Defecation may occur for several days after the obstruction has occurred or the animal may retain fecal matter in the colon due to the decreased peristaltic action in the posterior portion of the intestinal tract. With persistent vomiting dehydration is an almost constant symptom. Obstructions which occur in the posterior portion of the small intestine do not have as great a tendency for vomiting and dehydration. Death is usually due to the damage to the intestinal wall with subsequent paritis. In cases where the obstruction is not complete diarrhea may be evident. With a stasis of the intestines putrefaction by bacterial organisms occurs to a greater degree than normal and an indicanuria is present.

The case discussed here is one concerning a 9-month-old, female Alaskan Malamute, which entered Stange Memorial Clinic on November 24, 1956. The dog was presented with a history of persistent vomiting, anorexia and diarrhea of a weeks duration. Upon examination the dog had a temperature of 100.1° F. and was emaciated. During the entire hospitalization period the temperature never exceeded 101.0° F. The abdomen was not tense and three fecal masses were palpated in the colon. A hematological examination revealed a leucocytosis (19,000 w.b.c.). There was a shift to the left in the Schilling index (8,500 stabs to 8,600 segments). Anorexia was evident but no vomiting or defecation were observed. Combiotic (Pfizer) [400,000 units of Penicillin G Procaine and .5 Gm. of Dihydrostreptomycin Sulfate per 2 cc.] was administered for 2 days. A urine sample was obtained by catheterization. The only abnormal reaction was a two plus reaction with the Obermeyers test for idicanuria (read on basis of negative to plus four). The specific gravity was 1.021 and the pH 5.

On the fifth day of hospitalization diarrhea and dehydration were evident. Five hundred cc. of dextrose was given subcutaneously on this day and also on the seventh, eighth and ninth days of hospitalization. On the fifth and sixth day Sulfathaladine, 1.5 Gm., neomycin sulfate, 300 mg., kaolin, 3 Gm. and pectin, 3 Gm. were given in three divided dosages orally. This drug is a research drug of Sharpe and Dohme. The drug was administered in an attempt to restrict intestinal putrefaction.

On the fourth day of hospitalization the abdominal area was radiographed with the dog in a left lateral position. On observation of the wet film gas distension of the intestines and fecal material in the descending colon was noticed. Examination of the dry film the following day revealed a circular area of decreased density about 1 1/4 inches in diameter in the region of the last rib. It was then decided that radiographs should be taken with the aid of a contrast media. Bismuth sulphate was administered on the sixth day and radiographs were taken at 30 minutes, 3 hours and 24 hours. The radiograph at 30 minutes clearly indicated the gastric rugae, which indicates a gastritis. The duodenum and a small portion of the jejunum were filled with the bismuth. The presence of a foreign body could not be detected on the radiograph. In all the radiographs taken there was evidence of intestinal distension with gas. In the radiograph that was taken at 3 hours the stomach remained opaque and the bismuth had not reached the descending colon. Three hours after the ingestion of bismuth it should be present in the colon. The foreign object was visible in what appeared to be the proximal portion of the colon. The radiograph exposed after 24 hours indicated that the barium was in the colon. It also indicated the presence of the foreign object and distension of the intestine with gas.

An attempt to palpate the foreign object was made. The object was finally pal-
pated by raising the dog’s forelimbs so that her trunk was almost vertical. The object could then be palpated in the anterior region of the abdomen.

On the seventh day of hospitalization the dog was anesthetized with Surital Sodium (Parke & Davis) intravenously. The abdomen was prepared for surgery and an incision was made at the umbilicus approximately 5 inches in length. The foreign body was palpated in the colon and this portion of the intestines was packed off. The intestines did not appear to be damaged severely. An incision was made over the object 2 inches in length revealing a nut, similar to a hickory nut. The nut was removed and the intestines sutured with two rows of right angle Cushing sutures of 000 chromic catgut. The peritoneum and the rectus abdominis were held in apposition with simple interrupted sutures of 00 chromic catgut. The skin was sutured with simple interrupted Vetafil sutures.

One day postoperatively the dog was weak and 500 cc. of dextrose with 1 cc. of B-Sol® (Fort Dodge), a vitamin B-complex, was given subcutaneously. Two cc. of Combiotic® was given in two divided dosages in each of the next 4 days. The dog was still weak on the second day and 100 cc. of Paramidex® (Jen-Sal), which contains 15% amino acid and 10% dextrose was administered intravenously. A nutritional supplement, MWR 352 (Jen-Sal), was also given per os these first 2 days. On the third and fifth day post-operatively 500 cc. of milk with 4 teaspoons of Gevral® (Lederle), a protein supplement, was given per os. Five hundred cc. of dextrose was given on the fourth day. Horsemeat broth, 400 cc., was administered on the sixth day. On the seventh and eighth day the dog ate small amounts of canned dog food and 2 drams of Elixir B-Complex® (Parke & Davis) was given. The animal was discharged on January 8, 8 days postoperatively.

—Bruce Ewald, ’57

Chronic Neglect. The above picture is an exceptional case of neglect. The patient was admitted to

Stange Memorial Clinic, Jan. 19, 1957. On the twenty-third the excessive hoof growth was removed and the remainder was shaped into a temporary hoof.

—Henry Philmon, ’58

Traumatic Esophagitis. A 4 year old female Dalmation was admitted to the Stange Memorial Clinic on Aug. 13, 1956, with the following history. The local veterinarian had examined the dog and found a small, hard non-fluctuating mass in the region of the thyroid. It was surmised that the dog was possibly suffering from a thyroid deficiency, precipitated by a tumor in the region. The dog was placed on thyroid extract therapy but reacted violently by vomiting and exhibiting severe malaise.

Upon examination at the clinic, it was noted that besides the hard tumor-like mass the patient also displayed excessive salivation and a foul odor from the oral cavity. A right lateral radiograph of the head and neck area revealed a foreign body which resembled a common straight sewing needle lodged in the region of the trachea near the thoracic inlet.

The next day, the patient was anesthetized and the throat region from the rami of the mandibles to the thoracic inlet was