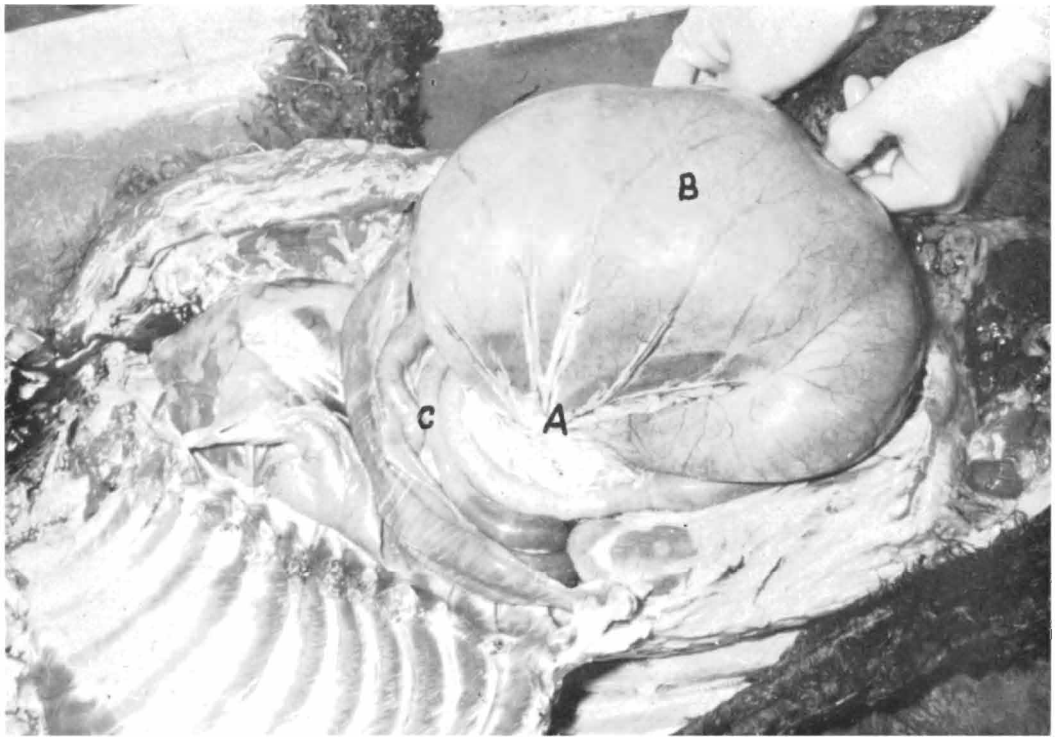
Clinical Quiz

History and symptoms are below. Make a diagnosis. Then turn the page for the correct diagnosis and the treatment.

John Clark, '58

Case History. A 7½-year old female Irish Water Spaniel, became acutely ill a few hours following its evening meal. Abdominal pain, unproductive vomiting, gaseous sounds, and abdominal distention were noted by the owner. The condition became progressively worse and collapse occured 12 hours after onset of symptoms. When presented to the Iowa State College clinic the following symptoms were noted: 1. prostration, 2. severe shock, 3. marked abdominal distention, 4. tympany over the entire abdominal area, 5. marked dyspnea, 6. pale and cyanotic mucous membranes, 7. very rapid heartbeat and weak thready pulse, 8. depressed temperature (99° F.).

DIAGNOSIS — next page.



Post-Mortem Findings.

Diagnosis. A 270°, left to right torsion of the stomach was shown on post-mortem, confirming the antemortem diagnosis. The post-mortem revealed the following points: 1. when viewed with the dog in dorsal recumbency, the torsion was clockwise and approximately 270° (Fig. 1, A), 2. Marked gastric tympany with the stomach filling most of the abdominal cavity (Fig. 1, B), 3. small intestine forced anteriorly until most of it lay between the stomach and liver or diaphragm (Fig. 1, C), 4. passive congestion of intestinal tract, 5. extreme passive congestion of the spleen (not seen in photograph), 6. the stomach contained some food and a few bone chips (1 x 2 cm.) were found in the small intestine, 7. exostosis at attachments of ligaments of the stifle.

Discussion. Gastric torsion is not a common occurrence. However, when it occurs it must be recognized without delay, since only a limited time is available for treatment.

In gastric torsion the stomach usually rotates from left to right, resulting in occlusion of the cardia and pylorus and constriction of the gastrosplenic vessels. The stomach becomes considerably distended with gas and is dark red to purple. The spleen becomes markedly enlarged, darker than normal and assumes a more curved configuration. The onset is sudden and the main symptoms are abdominal pain and distention, thirst, anorexia, rapid heartbeat and weak pulse. Death usually occurs in about 24 hours. The condition occurs most often in the larger breeds with a large deep thorax such as Great Danes and Irish Setters. A partially-filled stomach, mobility of the pyloric region and strenuous exercise are contributing factors.

Treatment. Immediate surgery is the only possible solution. A short delay can result in failure. The Irish Water Spaniel in question was tapped with a 14 gauge needle to relieve the respiratory distress resulting from the severe tympany. Euthanasia was performed upon owner's request due to the age, severe condition, and arthritic crippling of the animal.

Summary. Torsion of the stomach in the canine is not a common occurrence. When it occurs it is most commonly seen in large breeds with a deep thorax. Immediate surgical treatment is necessary. It is often advantagous to relieve respiratory embarrassment by tapping with a large gauge needle or a small trocar. Death results in the untreated patient in about 24 hours.

WINTER DYSENTERY IN DAIRY CATTLE. In this discourse the typical syndrome is outlined. The disease is highly contagious, and the carrier may be a recently purchased animal, or even the artificial inseminator or the veterinarian. The incubation period is 3 to 7 days. The onset is sudden with 10 to 100 percent of adult milking herd showing diarrhea. The temperature is 100 to 105 degrees F., 1 or 2 days prior to scouring, but usually normal during scouring. The feces are watery to porridge-like in consistency, profuse, granular to smooth in character depending upon the amount of mucus present, and dark brown to greenish-black in color. They have a characteristic odor that may occasionally be fetid. In severe cases the feces are bloody. The duration of scouring is about 1 to 5 days, with an average of 2 to 3 days. Milk production in lactating cows drops 30 to 60 percent. Most return nearly to normal a week after the outbreak terminates. Mortality is very low, probably one in 3,000 cases.

Immunity develops sufficiently to protect the herd at least one-half to 1 year. Typically the disease was more severe in the first few animals of a herd, less severe in subsequent cases. The greatest incidence of the disease was from December through March. It affected all ages of cattle, but was milder in calves and bulls.

Tests with a number of drugs and with "hemorrhagic septicemia" bacterin revealed that no treatment is known at the present time.

Roberts, S. J. Winter dysentery in dairy cattle. The Cornell Veterinarian. 47(3):372-388. July, 1957.