

Intestinal Obstruction

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BASIC INFORMATION

Description

For the intestinal tract to work properly, fluid and food material must be able to pass through its entire length. When the passage of material is obstructed, nutrients cannot be absorbed, fluids are lost from the body, and the animal can rapidly become severely ill. Obstructions may be partial or complete, with the latter being more serious.

Causes

The most common cause is a foreign body (such as a toy, piece of string, or fabric) or an indigestible food item (bone, large piece of cartilage) that has been swallowed by the animal. This type of obstruction tends to be more common in younger animals. Other diseases of the intestines or nearby organs can lead to intestinal obstruction, including intestinal tumors, abscesses, strictures, adhesions, intussusception (telescoping of the bowel onto itself), and enlargement of other organs.

Clinical Signs

The main signs are vomiting and loss of appetite. Because the intestinal tract constantly produces fluids, vomiting may continue even if the animal is not drinking. Loss of fluids from vomiting causes dehydration, which is manifested as stiffening of the skin, sunken eyes, and dry, tacky gums. Along with the water that is lost, essential electrolytes such as sodium and potassium are usually lost, leading to muscular weakness, lethargy, and depression.

Fever is also common, possibly from complicating bacterial infections. Diarrhea and abdominal pain may also occur. In some animals, the obstruction can be felt when the veterinarian palpates the abdomen, but some abdomens feel normal even when severe obstructions are present.

Diagnostic Tests

Typically, when an obstruction is suspected, x-rays of the abdomen are recommended. Bone or metallic foreign material is visible on x-rays, but other foreign bodies may not be. Other tests, such as a barium study (series of x-rays taken after the animal has swallowed barium) or an abdominal ultrasound may be done. An ultrasound is also useful for assessing other organs, such as the liver, spleen, or nearby lymph nodes (glands).

Animals with an intestinal obstruction are usually dehydrated and have lost significant amounts of essential electrolytes. Routine laboratory tests are used to measure electrolytes and look for evidence of complications, such as kidney problems and infections. Other tests may be recommended to rule out diseases

that cause similar signs and to search for metastasis if cancer is suspected.

Occasionally, the presence of an intestinal obstruction is not detected until an abdominal exploratory surgery is performed.

TREATMENT AND FOLLOW-UP

Treatment Options

The best treatment for intestinal obstruction is to remove the cause and relieve the obstruction. In most instances, intestinal surgery is required. In rare cases, obstructing objects can be removed from the first part of the small intestine with the use of an endoscope (a flexible fiberoptic tube that is introduced through the animal's mouth).

Dehydrated and severely ill animals must be stabilized with intravenous fluids and electrolytes prior to surgery. Other medications that may be administered include antibiotics, antiemetic drugs, and pain medications. With complete obstructions, surgery is performed as soon as the animal is stable.

A variety of surgical techniques are available for relieving obstructions. They include simple incisions into the intestines to remove foreign bodies, removal of segments and reconnection of the intestines, re-rotation of twisted sections of the intestine, repair of herniated or telescoped bowel, and other procedures.

Follow-up Care

Following surgery, most animals are hospitalized for 1-4 days for continued fluid therapy and administration of injectable drugs. All liquids and foods are commonly withheld for a period of time to allow the intestines to recover. Liquids are started initially, and then food is introduced if no vomiting occurs. Close monitoring of severely ill animals is required postoperatively.

Most animals are discharged with skin sutures (stitches) or staples that need to be removed 10-14 days after surgery. Dietary and exercise restrictions may be imposed during the recovery period.

Prognosis

Most animals recover fully if a foreign body was the source of the obstruction. In these cases, the main factors that influence the likelihood of survival are the severity of dehydration and electrolyte abnormalities present prior to surgery, the time that elapsed between the onset of complete obstruction and surgery, and the presence of other complications. Prognosis for intestinal obstructions from causes other than foreign bodies is highly variable. Animals with intestinal obstruction that do not have surgery usually die of other organ failure.