

BASIC INFORMATION

Description

Neoplasia is the term for tumor formation, and *gastric* pertains to the stomach. Gastric neoplasms can arise directly from tissues within the stomach, or they may develop when a tumor spreads to the stomach from other parts of the body (metastasis). Both benign and malignant tumors are found in the stomach, but most tumors in dogs and cats are malignant.

Cancer types that arise from components of the stomach include carcinoma (from the lining of the stomach), adenocarcinoma (from cells of stomach glands), fibrosarcoma (from connective tissue), lymphoma (from lymphocytes), plasmacytoma (from plasma cells), and leiomyosarcoma (from smooth muscles).

Leiomyoma is a benign tumor of the smooth muscles of the stomach wall. This tumor is most commonly diagnosed in older female dogs. Adenocarcinomas are the most common gastric tumors of dogs, and lymphoma is the most common tumor of cats. Malignant tumors are usually diagnosed in middle-aged or older dogs and cats, but lymphoma can also occur in younger cats.

Causes

There is no known cause for gastric cancers in the dog and cat.

Clinical Signs

The most common signs are vomiting and loss of appetite. Vomiting of blood or partly digested blood (that looks like coffee grounds) may occur. In some animals, the vomiting can be very severe and difficult to control. Vomiting causes the animal to lose fluids, so evidence of dehydration (dry and tacky skin and gums, sunken eyes) may be present.

Many animals have a poor appetite for a long time, and weight loss can be pronounced. Occasionally, your veterinarian may be able to feel a mass in the front part of the abdomen, but the stomach is located so deep in the abdomen that this is unusual.

Diagnostic Tests

Because the main signs of gastric tumors are vomiting and weight loss and many diseases can cause these signs, extensive laboratory tests and x-rays are usually recommended. An upper gastrointestinal contrast study (a series of x-rays taken after the animal has swallowed barium) can be particularly useful for showing masses inside the stomach. An abdominal ultrasound may be recommended, especially to look for spread of cancer to other organs in the abdomen. A mass in the stomach may not be seen on

ultrasound because gas in the stomach usually gets in the way. If cancer is suspected based on these tests, chest x-rays may also be done to look for metastasis.

Gastric endoscopy, using a flexible fiberoptic tube, can be useful to identify a tumor or abnormalities in the stomach. Endoscopy also provides a means for obtaining biopsy samples and assessing the size of the lesion for planning additional surgery.

TREATMENT AND FOLLOW-UP

Treatment Options

Treatment options depend on the type of tumor present. Lymphomas and plasmacytomas are best treated with chemotherapy, sometimes involving several different drugs. Carcinomas, adenocarcinomas, and smooth muscle tumors are best treated by attempted surgical removal. Surgery may then be followed by chemotherapy for some of these tumors. Removal of gastric tumors can be challenging, especially if they are large and infiltrate much of the stomach, so your pet may be referred to a veterinary surgery specialist for the procedure, and a consultation may be requested from a veterinary oncologist (who specializes in cancer medicine).

Potent anti-vomiting and antinausea medications can be used to provide symptomatic relief for some animals, but many animals develop vomiting from these tumors that is almost impossible to stop. For some animals, euthanasia may be recommended, especially if the cancer has spread to or from other sites and there is little chance of providing a good quality of life.

Follow-up Care

Periodic follow-up visits are required after surgery and during chemotherapy for cancerous tumors, for the rest of the life of the animal. Laboratory tests, x-rays, and ultrasounds are often needed to monitor response to treatment, to detect evidence of spread of the tumor, and to check for side effects of the medications.

Prognosis

Older dogs with leiomyoma have a fair to good prognosis if the mass can be completely removed with surgery. The surgery is a major one, and recovery can be prolonged, particularly in old, frail dogs. Some animals with lymphoma and plasmacytoma have a good response to chemotherapy and survive for significant periods of time. (See also the handouts on **Lymphoma in Dogs** and **Lymphoma in Cats**.) Most animals with other gastric cancers die of their disease within 3-6 months after the diagnosis is made.