

GASTROESOPHAGEAL REFLUX

BASICS

OVERVIEW

- “Gastro-“ refers to the stomach; “esophageal” refers to the esophagus; the “esophagus” is the tube running from the throat to the stomach
- “Reflux” is the medical term for backward flow
- “Gastroesophageal reflux” is backward or reverse flow of stomach or intestinal contents into the esophagus
- Incidence unknown; probably more common than clinically recognized
- Transient relaxation of the muscle between the stomach and esophagus (known as the “gastroesophageal sphincter”) or long-term (chronic) vomiting may permit backward or reverse flow (reflux) of gastrointestinal juices into the esophagus
- Inflammation of the esophagus (known as “esophagitis”) resulting from reflux may vary from mild inflammation of the superficial lining of the esophagus to severe ulceration involving the deeper layers of the esophagus

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs and cats

Breed Predispositions

- May be associated with congenital (present at birth) hiatal hernia seen in Chinese shar peis; “hiatal hernia” is a condition in which part of the stomach slips from the abdomen into the chest through the normal opening for the esophagus as it passes through the diaphragm (the opening through the diaphragm is the “esophageal hiatus”)

Mean Age and Range

- Occurs at any age; younger animals may be at increased risk because of developmental immaturity of the muscle between the stomach and esophagus (gastroesophageal sphincter)
- Young animals with congenital (present at birth) hiatal hernia may be at increased risk of developing gastroesophageal reflux; “hiatal hernia” is a condition in which part of the stomach slips from the abdomen into the chest through the normal opening for the esophagus as it passes through the diaphragm (the opening through the diaphragm is the “esophageal hiatus”)

SIGNS/OBSERVED CHANGES in the ANIMAL

- Return of food or other contents from the esophagus or stomach back up through the mouth (known as “regurgitation”)
- Excessive salivation (known as “hypersalivation”)
- Howling or crying during swallowing
- Lack of appetite (known as “anorexia”)
- Weight loss
- Physical examination often is unremarkable
- Fever and excessive salivation (hypersalivation)—with severe ulcerative inflammation of the esophagus (esophagitis)

CAUSES AND RISK FACTORS

- Anesthesia
- Failure to fast an animal prior to anesthesia
- Poor patient positioning during anesthesia
- Hiatal hernia (condition in which part of the stomach slips from the abdomen into the chest through the normal opening for the esophagus as it passes through the diaphragm [the opening through the diaphragm is the “esophageal hiatus”])
- Long-term (chronic) vomiting
- Young age

TREATMENT

HEALTH CARE

- Generally, managed as an outpatient

ACTIVITY

- Not necessary to restrict activity

DIET

- Moderate to severe cases—may withhold food for 1 to 2 days; thereafter, feed low-fat, low-protein meals in small, frequent feedings
- Dietary fat decreases tone of the muscle between the stomach and esophagus (gastroesophageal sphincter) and delays stomach emptying; protein stimulates stomach-acid secretion

- Avoid feeding high-fat foods; they might worsen the backward or reverse flow of stomach or intestinal contents into the esophagus (esophageal reflux)

MEDICATIONS

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive.

- Oral sucralfate suspension; sucralfate is a [medication that forms a protective barrier over ulcers in the gastrointestinal tract](#)
- Medications to decrease the secretion of stomach acid—cimetidine; ranitidine; famotidine; omeprazole
- Drugs that improve the propulsion of contents through the stomach and intestines (known as “gastrointestinal prokinetic agents,” such as cisapride, ranitidine, low-dose erythromycin)—may increase tone of the muscle between the stomach and esophagus (gastroesophageal sphincter)

FOLLOW-UP CARE

PATIENT MONITORING

- Patients do not necessarily require follow-up procedure using a special lighted instrument called an “endoscope” that is passed into the esophagus and stomach through the mouth to allow the veterinarian to see the lining of the esophagus and stomach (general term for procedure is “endoscopy”); however, endoscopy may be considered for patients that do not respond to medical treatment
- Monitor clinical signs

PREVENTIONS AND AVOIDANCE

- Avoid feeding high-fat foods; they might worsen the backward or reverse flow of stomach or intestinal contents into the esophagus (esophageal reflux)

POSSIBLE COMPLICATIONS

- Inflammation of the esophagus (esophagitis)
- Abnormal narrowing of the esophagus (known as “esophageal stricture”)

KEY POINTS

- Avoid feeding high-fat foods; they might worsen the backward or reverse flow of stomach or intestinal contents into the esophagus (esophageal reflux)

