Lake Shore Pet Hospital

Sudden (Acute) Vomiting

Basics

OVERVIEW

- "Vomiting" is the forceful ejection of stomach contents up through the mouth
- "Acute" is an adjective used in medical writing to indicate a sudden or rapid onset and short course of a disease or medical condition
- Sudden (acute) vomiting is defined as vomiting of short duration (less than 5–7 days) and of variable frequency
- The gastrointestinal tract includes the stomach, small intestines, and large intestines (known as the "colon")

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs
- Cats

SIGNS/OBSERVED CHANGES IN THE PET

- Variable vomiting of food and/or fluid (may be clear, yellow-tinged [containing bile from the upper small intestine], or blood-stained)
- Ingestion of foreign material may be observed in some pets
- Variable sluggishness (lethargy) and appetite loss; may see diarrhea and/or black, tarry stools (due to the presence of digested blood; condition known as "melena")
- May include signs of dehydration, such as dry gums / moist tissues of the body (moist tissues are known as "mucous membranes"); reduced skin turgor (turgor is the normal fullness or tension of tissues resulting from fluid content); sunken eyes; pale mucous membranes; rapid heart rate (known as "tachycardia"); and weak pulses; other findings on physical examination may include fluid-filled bowel loops; excessive gut sounds; abdominal pain, which may be localized (such as from a foreign body; inflammation of the pancreas [known as "pancreatitis"]; inflammation/infection of the kidneys [known as "pyelonephritis"]; and liver disease]; or may be generalized or diffuse abdomen pain (such as from inflammation of the lining of the abdomen [known as "peritonitis"] or severe inflammation of the intestines [known as "enteritis"]); or an abdominal mass (such as a foreign body; folding of one segment of the intestine into another segment [known as "intussusception"]; or twisted (torsed) abdominal organs (such as dilated and twisted stomach); may also be unremarkable exam findings
- May see fever with infectious and inflammatory causes

CAUSES

- Adverse food reactions—indiscretions (eating rapidly, ingestion of foreign material); intolerances (such as sudden diet change, allergies)
- Drugs—antibiotics, anti-inflammatory drugs (such as steroids and non-steroidal anti-inflammatory drugs [NSAIDs]); chemotherapy drugs; heart medication (such as digitalis); narcotics; xylazine (a sedative)
- Inflammation of the gastrointestinal tract—infectious inflammation of the intestines (enteritis): viruses (canine parvovirus, canine distemper virus, canine corona virus, feline parvovirus [panleukopenia]); bacteria (*Salmonella*, *Campylobacter*); very sudden (known as "peracute") bloody inflammation of the intestines (known as "hemorrhagic gastroenteritis") of dogs
- Ulcers of the stomach (gastric ulcers) or upper small intestine (known as duodenal ulcers")
- Blockage or obstruction of the gastrointestinal tract—such as caused by foreign bodies; folding of one segment of the intestine into another segment (intussusception); cancer; stomach dilating with gas and/or fluid (known as "gastric dilatation"), and subsequently rotating around its short axis (known as "volvulus")—condition known as "gastric dilatation-volvulus" or "bloat"; loss of intestine motility (ileus); constipation; thickening of the tract lining leading to swelling and blockage (known as "mucosal hypertrophy")
- Generalized (systemic) disease—excess levels of urea and other nitrogenous waste products in the blood (known as "uremia" or "azotemia"); liver failure; sepsis (presence of pus-forming bacteria and their poisons in the blood or tissues); increased levels of acid in the body (known as "acidosis"); electrolyte imbalance (such as low levels of potassium in the blood [known as "hypokalemia"]; low levels of calcium in the blood [known as "hypocalcemia"]; and high levels of calcium in the blood [known as "hypercalcemia"])
- Abdominal disorders—inflammation of the pancreas (pancreatitis); inflammation of the lining of the abdomen (peritonitis); and inflammation with accumulation of pus in the uterus (known as "pyometra")
- Endocrine disease—inadequate production of steroids by the adrenal glands (known as "hypoadrenocorticism" or "Addison's disease"); condition in which levels of acid are increased in the blood due to the presence of ketone bodies secondary to diabetes (known as "diabetic ketoacidosis")
- Nervous system disease—vestibular disturbances (inner ear problems leading to "dizziness" and nausea); inflammation of the membranes covering the brain and spinal cord (known as "meningitis"); inflammation of the brain (known as "encephalitis"); central nervous system trauma
- Parasitism—roundworms (ascarids), *Giardia, Physaloptera*, *Ollulanus tricuspis* (cats), salmon poisoning (dogs)
- Toxins—lead, ethylene glycol, zinc, fungal toxins (known as "mycotoxins"), household plants
- Miscellaneous—anaphylaxis, heat stroke, motion sickness, pain, fear

Treatment

HEALTH CARE

- Pets with non-serious vomiting are treated on an outpatient basis, hospitalize if severe vomiting; fasting is not warranted unless the vomiting is uncontrolled and there is increased risk of inhaling the vomitus (risk of aspiration pneumonia); no food and water (NPO) and intravenous (IV) fluids, while further diagnostics are performed

ACTIVITY

- Limit activity until vomiting has stopped

DIET

- If vomiting resolves, initially offer small amounts of water or ice cubes and if vomiting does not recur, follow with an easily digestible, low-fat, single-protein and single-carbohydrate-source prescription intestinal diet (or homemade such as non-fat cottage cheese or skinless white chicken and rice at a 1:3 ratio)
- If vomiting does not recur, wean the pet back onto the normal diet over 4–5 days

SURGERY

- Surgery may be indicated, based on the underlying cause of the vomiting (for example, gastrointestinal foreign body, peritonitis, or blockage)

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

- May use drugs to control nausea and vomiting (known as "antiemetics") in pets with severe vomiting causing electrolyte and/or acid–base disturbances or inflammation caused by reverse flow of stomach contents into the esophagus (known as "reflux esophagitis")
- Several drugs to control nausea and vomiting (antiemetics) are available for both dogs and cats—phenothiazine derivatives (such as chlorpromazine and metoclopramide) and maropitant for dogs only; H1-receptor antagonists (such as diphenhydramine) can be used in motion sickness (for dogs only)
- Maripotant; dolasetron to control nausea and vomiting
- Omeprazole, pantoprazole (proton pump inhibitors, reduce stomach acid production)
- H2-blockers (such as cimetidine, famotidine, nizatidine)
- Ulcers of the stomach and/or upper small intestine—can use H2-blockers (such as ranitidine, famotidine, which also increases stomach emptying) and/or the stomach lining protectant (sucralfate)
- Antibiotics (such as ampicillin or metronidazole) may be indicated in cases with fever or evidence of stomach/upper intestine lining injury (such as vomiting blood [known as "hematemesis"] or black, tarry stools [due to the presence of digested blood; condition is melena])

Follow-Up Care

PATIENT MONITORING

- If frequency of vomiting increases or serious problems occur, hospitalize pets for treatment and obtain appropriate diagnostics
- If vomiting persists beyond 7 days, despite medical treatment, pursue appropriate testing for long-term (chronic) vomiting

PREVENTIONS AND AVOIDANCE

- Maintain pet on a consistent, high-quality diet; do not change food abruptly
- Keep pet out of trash and monitor pet when outside or when playing to avoid eating inappropriate materials (such as rocks, bones, or toys)

POSSIBLE COMPLICATIONS

- Aspiration pneumonia (inflammation of the lungs, caused by accidentally inhaling food, vomit, or liquids)
- Inflammation of the esophagus (the tube running from the throat to the stomach; condition known as "esophagitis")
- Dehydration and electrolyte disturbances

EXPECTED COURSE AND PROGNOSIS

- A bland low-fat highly digestible diet usually will control non-serious vomiting
- Recovery from non-serious vomiting is usually rapid and spontaneous
- Prognosis for pets with gastrointestinal foreign bodies is good after removal of the foreign body by endoscopy or surgery; endoscopy is a general term for the procedure using a special lighted instrument called an "endoscope" that is passed into the esophagus and stomach through the mouth

Key Points

- Sudden (acute) vomiting is defined as vomiting of short duration (less than 5–7 days) and of variable frequency
- The most frequent cause of sudden (acute) vomiting is dietary indiscretion (that is, eating something that should not be eaten or eating something that is different from the normal diet)
- Maintain pet on a consistent diet; do not change food abruptly
- Keep pet out of trash and monitor pet when outside to avoid eating inappropriate materials (such as rocks,

bones) and while playing to prevent the pet from eating a toy
- Recovery from non-serious vomiting is usually rapid and spontaneous