

SUDDEN (ACUTE) DIARRHEA

BASICS

OVERVIEW

- Sudden or recent onset of abnormally increased water content and/or solid content in the bowel movements

SIGNALMENT/DESCRIPTION of ANIMAL

- Dogs or cats
- Any animal can suffer from acute diarrhea; kittens and puppies are affected most frequently

SIGNS/OBSERVED CHANGES in the ANIMAL

- Acute diarrhea is usually self-limiting (will resolve quickly), an isolated episode and does not affect the animal in general
- Other cases are mild, do not affect the animal in general, and resolve after a few days
- Sometimes it is sudden (acute) or very sudden (peracute) severe disease; more common in dogs (for example, parvovirus-related diarrhea) than cats
- Patients that are not generally ill have normal body fluid content (hydration) and minimal systemic signs
- Signs of more severe illness (such as vomiting, fever, abdominal pain, blood in the stool [hematochezia], vomiting blood [hematemesis], severe dehydration, weakness, or depression) should prompt more aggressive diagnostic and therapeutic measures
- Fecal accidents, vomiting, changes in fecal consistency and volume, blood or mucus in the feces, or straining to defecate
- Listlessness and lack of appetite (anorexia) may precede diarrhea due to viral enteritis

CAUSES

- Systemic illness may lead to diarrhea as a secondary event
- Dietary indiscretion—eating garbage, nonfood material, or spoiled food
- Dietary changes—sudden changes in amount or type of food, including change in brand of food
- Dietary intolerance—abnormal digestion or absorption of food (maldigestion or malabsorption) of foodstuffs; body “over responds” to a particular ingredient in the food (dietary hypersensitivity)
- Metabolic diseases—such as hypoadrenocorticism (Addison’s disease; disease in which adrenal glands produce inadequate levels of steroids), liver disease, kidney disease, and pancreatic disease can cause acute or chronic diarrhea
- Intestinal blockage (obstruction) or foreign bodies—eating nonfood items (foreign bodies); folding of one segment of the intestine into another segment (known as “intussusception”), or twisting of the intestines and intestinal blood vessels (known as “intestinal or mesenteric volvulus”)
- Unknown cause (known as “idiopathic”)—hemorrhagic gastroenteritis, a specific condition characterized by bloody inflammation of the stomach and intestines and very high packed-cell volume (PCV) caused by the cellular portion of the blood being a high percentage of the blood volume as compared to the fluid portion (a sign of dehydration)
- Infectious causes
 - Viral—parvovirus (canine parvovirus infection and feline panleukopenia), coronavirus, rotavirus, canine distemper virus
 - Bacterial—*Salmonella*, *Campylobacter*, *Clostridium*, *Escherichia coli*
 - Parasitic—hookworms, roundworms, whipworms, strongyles, and tapeworms, *Giardia*, coccidia
 - *Rickettsia*—salmon poisoning (*Neorickettsia*)
 - Fungal—Histoplasmosis
- Drugs and toxins—such as heavy metals (example, lead), organophosphates (chemicals found in insecticides), nonsteroidal anti-inflammatory drugs (NSAIDs), steroids, antimicrobials, anthelmintics, cancer drugs, lawn and garden products

RISK FACTORS

- Young dogs and cats present for diarrhea from dietary indiscretion, intussusception, foreign bodies, and infectious causes more often than older patients

TREATMENT

HEALTH CARE

- Depends largely on the severity of illness and underlying cause of the diarrhea
- Patients with mild illness can be treated as outpatients with symptomatic therapy; patients with more severe illness or that fail to respond to symptomatic therapy should be treated more aggressively
- Fluid therapy and correction of electrolyte imbalances is the mainstay of treatment in most cases
- Crystalloid fluid therapy may be administered by mouth (orally), under the skin (subcutaneously), or into a vein (intravenously), as required; can give oral fluids (water or carbohydrate- and electrolyte-containing fluids) to patients that are not vomiting
- Fluid therapy goal is to return the patient to proper body fluid (hydration) status (over 12 to 24 hours) and replace any ongoing losses due to diarrhea and/or vomiting

- Severe body fluid loss can occur with acute diarrhea; aggressive shock fluid therapy may be necessary
- Potassium supplementation may be necessary; patients with severely low levels of potassium in their blood (known as “hypokalemia”) may require more aggressive potassium supplementation

ACTIVITY

- Based on the severity of illness, underlying cause of the diarrhea, and necessary treatment (medical, surgical or both)

DIET

- Patients with mild illness that are not vomiting—a period of fasting (12 to 24 hours) often is followed by a bland diet, such as boiled rice and chicken or a commercial therapeutic diet (for example, Hill’s Prescription Diet® i/d®, Purina Veterinary Diets® EN®)
- Diet recommendations are based on the severity of illness and underlying cause of the diarrhea
- Limit exposure to garbage, foods other than the patient’s normal diet, and potential foreign bodies

SURGERY

- Treatment of intestinal intussusception (the folding of one segment of the intestine into another segment)
- Treatment of intestinal blockage (obstruction), intestinal twisting (intestinal or mesenteric volvulus), or removal of foreign bodies

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.

- Antidiarrheal drugs can be classified as drugs that change the movements of the intestinal tract (known as “motility-modifying drugs”), drugs that decrease secretions in the intestinal tract (known as “antisecretory drugs”), or drugs that coat or protect the lining of the intestines (known as “intestinal protectants”)
- Motility-modifying drugs generally operate by increasing the movement of certain segments of the intestinal tract (known as “segmental motility”) and thus increasing the time for materials within the intestinal tract to move through it (that is, it increases transit time; an example of this type of motility-modifying drug is loperamide) or by decreasing forward movement or motility of the intestinal tract (examples of this type of motility-modifying drug are the anticholinergics); these medications are not necessary in mild disease, as it is generally self-limiting
- In severe disease, the veterinarian will administer fluids
- Acute diarrhea that does not resolve with antidiarrheal drugs merits further investigation
- Anticholinergics (such as atropine, propantheline) can produce a generalized lack of movement in the intestine, leading to a condition known as “ileus,” because the drugs decrease segmental and peristaltic motion; this decrease in tone can increase the severity of diarrhea in some patients
- Antisecretory drugs (such as opiates, anticholinergics, chlorpromazine, and salicylates) are used to decrease the volume of fluid in the feces
- **Bismuth subsalicylate** may be of some benefit because of the antisecretory properties of salicylate; cats can be sensitive to the drug
- Intestinal protectants generally are not helpful in patients with acute diarrhea and have not been shown to change intestinal fluid or electrolyte loss
- Treatment for intestinal parasites if parasites are suspected (empirical treatment) or if parasites or their eggs are seen on analysis of feces (definitive treatment)
- Antibiotic therapy is probably unnecessary for most cases of mild illness and may actually cause diarrhea; patients with bacteria-caused inflammation of the intestines (enteritis), severe illness, low white blood-cell counts (known as “leukopenia”), or suspected breakdown of the gastrointestinal mucosal barrier (as evidenced by blood in the feces) should be treated with broad-spectrum antibiotics

FOLLOW-UP CARE

PATIENT MONITORING

- Most acute diarrhea resolves within a few days
- If clinical signs persist, additional diagnostics and treatments may be necessary
- Recheck stool samples in those patients that had parasites identified by fecal analysis
- Monitor for intussusception in patients with acute diarrhea, especially young dogs with parvoviral diarrhea and parasitism

PREVENTIONS AND AVOIDANCE

- Puppies and kittens should be vaccinated against infectious causes of diarrhea (such as parvovirus) and treated for intestinal parasites per recommendations from your pet’s veterinarian
- Routine stool sample analysis for intestinal parasites
- Limit exposure to garbage, foods other than the patient’s normal diet, and potential foreign bodies

POSSIBLE COMPLICATIONS

- Intussusception, thought to be associated with increased intestinal motility
- *Campylobacter* enteritis is contagious to people
- Some strains of *Giardia* may be contagious to people
- Roundworm larvae can migrate through the body causing visceral larval migrans and hookworm larvae can migrate under the skin causing cutaneous larval migrans in people, particularly children

EXPECTED COURSE AND PROGNOSIS

- Most acute diarrhea resolves within a few days
- Determined by the severity of illness, underlying cause of the diarrhea, and necessary treatment (medical, surgical or both)

KEY POINTS

- Sudden or recent onset of abnormally increased water content and/or solid content in the bowel movements
- Any animal can suffer from acute diarrhea; kittens and puppies are affected most frequently
- Acute diarrhea is usually self-limiting (will resolve quickly)
- Signs of more severe illness (such as vomiting, fever, abdominal pain, blood in the stool [hematochezia], vomiting blood [hematemesis], severe dehydration, weakness, or depression) should prompt more aggressive diagnostic and therapeutic measures

