

# FECAL INCONTINENCE

## (INVOLUNTARY PASSAGE OF FECES OR BOWEL MOVEMENTS)

### BASICS

#### OVERVIEW

- Inability to retain feces or bowel movements, resulting in involuntary passage of fecal material

#### SIGNALMENT/DESCRIPTION of ANIMAL

##### **Species**

- Dogs and cats

##### **Mean Age and Range**

- Although any age animal may be affected, incidence increases in older patients

#### SIGNS/OBSERVED CHANGES in the ANIMAL

##### **Reservoir Incontinence (inadequate fecal-holding capabilities of the colon and/or rectum)**

- Urge to defecate; frequent, conscious defecation without dribbling of feces; defecation may be associated with straining (known as “tenesmus”); difficulty in defecation (known as “dyschezia”) or blood in the stool (known as “hematochezia”)
- May have sensitivity or pain in the anus or rectum when the veterinarian feels the lower bowel on physical examination; an anal or rectal mass or thickening of the lining of the rectum may be detected; external anal sphincter (ring of muscle that opens and closes the opening of the anus) and anal reflex are normal

##### **Non-Nervous System-Related Anal Sphincter Incontinence (the anal sphincter is the ring of muscle that opens and closes the opening of the anus)**

- May include evidence of trauma to the skin and/or tissues surrounding the anus (known as “perineal tissues”) or deep infection involving the skin surrounding the anus, with extensive tracts (known as “perianal fistulas”); the anal reflex is present, but the external anal sphincter (ring of muscle that opens and closes the opening of the anus) may not close completely, if the sphincter has been disrupted structurally

##### **Nervous System-Related Anal Sphincter Incontinence (the anal sphincter is the ring of muscle that opens and closes the opening of the anus)**

- Involuntary expulsion or dribbling of bowel movement, especially during excitement, barking or coughing
- May include loss of tone to the external anal sphincter (ring of muscle that opens and closes the opening of the anus), but anal tone is a poor indicator of anal sphincter function; the anal reflex is absent or diminished
- Presence of urinary incontinence in addition to fecal incontinence suggests nervous system-related anal sphincter incontinence
- Additional findings suggesting lumbosacral spinal-cord disease include loss of voluntary movement and tone to the tail; pain in the area of the spine near the tail (known as “lumbosacral pain”); partial or complete paralysis, characterized by flabby muscles (lack of muscle tone), of the hindquarters and rear legs (known as “flaccid posterior paresis or paralysis”); and diminished response to nervous system testing of the reflexes to the rear legs

#### CAUSES

##### **Reservoir Incontinence (inadequate fecal-holding capabilities of the colon and/or rectum)**

- Diseases of the colon (large bowel) and/or rectum—inflammation of the colon (known as “colitis”); irritable bowel syndrome; cancer
- Diarrhea—large volumes of feces from any cause can overwhelm the absorptive and storage capacity of the colon

##### **Non-Nervous System-Related Anal Sphincter Incontinence (the anal sphincter is the ring of muscle that opens and closes the opening of the anus)**

- Traumatic injuries to the anus—bite wounds, lacerations, or gunshot wounds
- Disruption of the external anal sphincter and anal muscles during surgery of the anus and/or rectum
- Deep infection involving the skin surrounding the anus, with extensive tracts (perianal fistulas)

##### **Nervous System-Related Anal Sphincter Incontinence (the anal sphincter is the ring of muscle that opens and closes the opening of the anus)**

- Central nervous system disease—degenerative myelopathy, a disease of the spinal cord; birth defects (such as spinal dysraphism, spina bifida); trauma; intervertebral disk disease; cancer; inflammation of the spinal cord and its coverings (known as “meningomyelitis”) of various causes; blockage of blood vessels going to the spinal cord by pieces of fibrocartilage (known as “fibrocartilaginous embolism”) and other blood vessel disorders
- Cauda equina syndrome is a group of disorders in which the lumbosacral vertebral canal is narrowed, resulting in pressure on the nerve roots as they leave the spinal cord—intervertebral disk extrusion at the sixth-seventh lumbar (L<sub>6</sub>-L<sub>7</sub>) vertebral

space or the seventh lumbar to the first sacral (L<sub>7</sub>-S<sub>1</sub>) vertebral space; formation of bony spurs around the edges of the vertebral endplates (known as “spondylosis deformans”); congenital (present at birth), narrowed vertebral canal (known as “congenital spinal canal stenosis”); lumbosacral instability; bacterial or fungal infection of the intervertebral disks and adjacent bone of the spine (vertebral bodies; condition is known as “diskospondylitis”); and cancer

- Nervous disorders involving the nerves outside of the central nervous system, such as the nerves to the anus—infectious; immune-mediated; drug-induced (such as vincristine sulfate, a chemotherapeutic drug); disorder of the autonomic nervous system (known as “dysautonomia”) and disorders/diseases of unknown cause (known as “idiopathic disorder or disease”)
- Muscular or nervous/muscular disorders
- Degeneration (aging)—multiple factors likely are involved, including loss of muscle mass (known as “muscular atrophy”) of the muscles involved in the control of defecation (known as “fecal continence”); weakness; degenerative nervous system disorders; and senility

#### **RISK FACTORS**

- Disease and/or surgery of the anus and/or rectum
- Nervous system disease

### **TREATMENT**

#### **HEALTH CARE**

- If possible, identify and treat the underlying cause; fecal incontinence may resolve if the underlying cause is treated successfully
- Frequent warm water enemas may diminish the volume of feces in the colon and thus decrease the incidence of inappropriate defecation
- Environmental changes (such as making the pet an outside pet) may increase client satisfaction and thus avoid euthanasia of an otherwise healthy animal
- Reflex defecation can be induced sometimes in animals with hindquarter paralysis by applying a mild pinch on the toe on a pelvic limb or tail; similarly, applying a warm washcloth to the anus or perineum may stimulate defecation
- Improvement in signs may be achieved if specific therapy for perianal fistula, inflammatory bowel disease (IBD), or other reservoir or non-nervous system-related causes of incontinence can be given

#### **ACTIVITY**

- Depends on underlying cause

#### **DIET**

- Fecal volume can be reduced by feeding low-residue commercial diets or other foods, such as cottage cheese and rice and/or tofu
- Feed pet at established times to better control times needed to defecate

#### **SURGERY**

- Surgical reconstruction of lesions of the anus and/or rectum may improve fecal continence markedly in patients with non-nervous system-related anal sphincter (ring of muscle that opens and closes the opening of the anus) incontinence
- Various surgical procedures, involving the use of tissue or silicone slings, have met with variable success in treating nervous system-related anal sphincter incontinence in dogs

### **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.

- Opiate intestinal motility-modifying drugs (such as diphenoxylate hydrochloride and loperamide hydrochloride) increase segmental contraction of the bowel and slow passage of fecal material, thus increasing the amount of water absorbed from the feces
- Anti-inflammatory agents (such as steroids and sulfasalazine) may benefit patients with suspected reservoir incontinence due to inflammatory bowel disease (IBD)
- No specific drugs have been shown to be effective in patients with nervous system-related anal sphincter incontinence

### **FOLLOW-UP CARE**

#### **PATIENT MONITORING**

- If fecal incontinence is due to an underlying nervous system cause, use serial neurologic examinations to monitor patient progress
- Diagnostic procedures (such as X-rays, electromyography [studies evaluating the speed of conduction of impulses in nerves], cerebrospinal fluid analysis) also can be used to follow progress

- Check fecal consistency and volume and make sure the pet does not become constipated
- Adjust diet and motility-modifying drug dosages to find the appropriate therapy for each individual patient

#### **POSSIBLE COMPLICATIONS**

- One recent report indicated that 50% of pets with fecal incontinence were euthanized

#### **EXPECTED COURSE AND PROGNOSIS**

- Prognosis is poor if the underlying cause cannot be identified and successfully corrected; discuss the prognosis with the client early in the evaluation, to avoid unrealistic expectations
- Nervous system-related anal sphincter incontinence often is unresponsive to treatment, despite appropriate dietary, medical, and surgical treatment

#### **KEY POINTS**

- Inability to retain feces or bowel movements, resulting in involuntary passage of fecal material
- If possible, identify and treat the underlying cause; fecal incontinence may resolve if the underlying cause is treated successfully
- Fecal volume can be reduced by feeding low-residue commercial diets or other foods, such as cottage cheese and rice and/or tofu
- Feed pet at established times to better control times needed to defecate
- Prognosis is poor if the underlying cause cannot be identified and successfully corrected; discuss the prognosis with the client early in the evaluation, to avoid unrealistic expectations
- Nervous system-related anal sphincter incontinence often is unresponsive to treatment, despite appropriate dietary, medical, and surgical treatment

