# **DIFFICULTY SWALLOWING (DYSPHAGIA)**

## BASICS

#### OVERVIEW

• Difficulty swallowing, resulting from the inability to grasp (prehend), form, and move a mass of chewed food (bolus) through the back of the mouth and throat (known as the "oropharynx") into the esophagus (the tube running from the oropharynx to the stomach)

#### SIGNALMENT/DESCRIPTION of ANIMAL

#### Dogs and cats

• Congenital (present at birth) disorders that cause difficulty swallowing (such as cricopharyngeal achalasia [a condition of the nerves and muscles in the upper esophagus, in which the muscles do not relax adequately to allow swallowing] and cleft palate) usually are diagnosed in animals less than 1 year of age

• Acquired (develop after birth) disorders that cause difficulty swallowing related to the throat or pharynx (known as "pharyngeal dysphagia") are more common in older patients

#### SIGNS/OBSERVED CHANGES in the ANIMAL

• Drooling, gagging, weight loss, ravenous appetite, repeated attempts at swallowing, swallowing with the head in an abnormal position, coughing (due to aspiration), regurgitation, painful swallowing, and occasionally lack of appetite (anorexia) are possible

• Foreign bodies cause sudden (acute) signs of difficulty swallowing; pharyngeal problems may cause long-term (chronic) and intermittent signs of difficulty swallowing

• Observe the patient eating; this may localize the abnormal phase of swallowing

• Modified eating behavior (such as eating with head tilted to one side and throwing head back while eating)

• Paralysis of the lower jaw (mandible) or tongue, dental disease, abnormalities of the muscles on the top of the head (masticatory muscles), inability to open the mouth, and food packed in the cheek area of the mouth, without the presence of saliva suggest problems with the mouth (known as "oral dysphagia")

• Normal grasping (prehension) of the food with repeated attempts at swallowing, while repeatedly bending (flexing) and straightening (extending) the head and neck; excessive chewing, and gagging suggest problems with the throat (known as "pharyngeal dysphagia"); saliva-coated food retained in the check area of the mouth, a diminished gag reflex, and nasal discharge from aspiration also may be seen

• Repeated, nonproductive efforts to swallow, gag, and cough, then forcibly bring food back up (regurgitate) immediately after swallowing with normal gag reflex and grasping (prehension) of food; emaciation suggest problems in the upper esophagus or cricopharyngeal area (known as "cricopharyngeal dysphagia")

#### CAUSES

Anatomic or mechanical lesions include inflammation of the throat or pharynx (for example, abscess, inflammatory polyps, and oral eosinophilic granuloma [a mass or nodular lesion containing a type of white blood cell, called eosinophils), enlarged lymph nodes behind the throat (known as "retropharyngeal lymphadenomegaly"), cancer, foreign body in the throat or behind the throat, cystic mass under the tongue or base of the mouth (known as a "sialocele"), disorders of the joint of the lower jaw (known as "temporomandibular joint [TMJ] disorders"), mandibular fracture, cleft palate, and trauma to the throat
Pain as a result of dental disease (for example, tooth fractures and abscess), mandibular trauma, inflammation of the mouth

• Pain as a result of dental disease (for example, tooth fractures and abscess), mandibular trauma, inflammation of the mouth (stomatitis), inflammation of the tongue (glossitis), and inflammation of the throat (pharyngitis) may disrupt normal swallowing

• Disorders of the nerves and muscles involved in swallowing include cranial nerve deficits and inflammation of the muscles of chewing (known as "masticatory muscle myositis")

• Weakness (paresis) or paralysis of the muscles of the throat or pharynx can be caused by infectious agents (such as *Toxoplasma* and *Neospora*), immune-mediated inflammation of several muscles (known as "polymyositis"), muscular dystrophy, various nerve diseases, and disorders involving the area between the muscle and nerves (known as "myoneural junction disorders," such as myasthenia gravis, tick paralysis, and botulism)

• Rabies can cause difficulty swallowing by affecting the brain stem and peripheral nerves

• Other central nervous system disorders, especially those involving the brain stem

#### **RISK FACTORS**

• Many of the causative neuromuscular conditions have breed predispositions

## TREATMENT

#### HEALTH CARE

• Primary treatment is directed at the underlying cause for the difficulty in swallowing

• Patients with oral dysphagia may be able to swallow if a small sphere of food is placed carefully in the back of the mouth; other patients may find a gruel that can be lapped easier to swallow; take care to avoid aspiration when feeding orally

• Elevating the head and neck may make swallowing easier for patients with problems in the throat or upper esophagus leading to difficulty swallowing (pharyngeal or cricopharyngeal dysphagia) and help prevent aspiration of food

#### DIET

- Nutritional support is important for all patients having difficulty swallowing
- Multiple, small meals or gruel may allow easier swallowing

#### SURGERY

- If nutritional requirements cannot be met orally, a feeding tube may be implanted surgically into the stomach
- Surgical removal of a mass or foreign body may be curative or temporarily improve difficulty in swallowing
- Surgically cutting the muscle in the upper esophagus (known as "cricopharyngeal myotomy") may benefit patients with cricopharyngeal dysphagia

### MEDICATIONS

• Dysphagia or difficulty swallowing generally is not immediately life threatening; medications should be directed at the underlying cause

## FOLLOW-UP CARE

#### PATIENT MONITORING

• Monitor daily for signs of aspiration pneumonia (such as depression, fever, whitish to yellowish discharge from the nose, coughing, and difficulty breathing [dyspnea])

• Check body condition and hydration status daily; if oral nutrition does not maintain the animal's weight and fluid needs, use tube feeding

#### PREVENTIONS AND AVOIDANCE

• Feeding multiple, small meals with the patient in an upright position and maintaining this position for 10 to 15 minutes after feeding helps prevent aspiration of food

#### **POSSIBLE COMPLICATIONS**

- Aspiration pneumonia is a common complication with swallowing disorders
- Consider rabies in any patient with difficulty swallowing (dysphagia), especially if the animal's rabies vaccination status is unknown or questionable or if the animal has been exposed to a potentially rabid animal

#### EXPECTED COURSE AND PROGNOSIS

• Depends on the underlying cause

## **KEY POINTS**

- Primary treatment is directed at the underlying cause of the difficulty in swallowing
- Nutritional support is important for all patients having difficulty swallowing

• Feeding multiple, small meals with the patient in an upright position and maintaining this position for 10 to 15 minutes after feeding helps prevent aspiration of food

• Aspiration pneumonia is a common complication with swallowing disorders