



## **Esophageal Obstruction (Choke)**

Esophageal obstruction has many causes. Most often it is caused by impaction of feed material or foreign objects in the esophagus. Eating too quickly can predispose a horse to choke, especially if the horse is exhausted, dehydrated or debilitated. Dental abnormalities can predispose a horse to choke as the horse cannot effectively grind his feed. Prior trauma to the esophagus, masses in the lumen or outside the lumen of the esophagus, or congenital abnormalities are other possible causes for esophageal obstruction.

### **Clinical Signs**

The clinical signs are primarily related to the regurgitation of food, water and saliva as the impacted material cannot pass through to the stomach. Horses are often anxious and stand with their neck extended. They can also be seen to gag or retch. They are usually unable or reluctant to continue eating. Nasal discharge may be seen, with or without feed material as well as coughing and excessive salivation. Aspiration pneumonia (feed or saliva in the lungs) is a real risk and in extreme cases, rupture of the esophagus can occur.

### **Diagnosis**

Clinical signs often point to choke but they do not indicate if the horse has aspirated, the condition of the esophagus or the nature of the obstruction. Passage of a nasogastric tube is an effective way to determine if the esophagus is obstructed. Endoscopic examination can help the veterinarian visualize the esophagus to determine the extent of damage or nature of the impaction. Ultrasonography can be useful as well. A veterinarian can listen to the lungs to assess abnormalities that may indicate aspiration pneumonia.

### **Treatment**

Take away feed and water, place your horse in the most stress-free environment possible, and call our office. Our doctors will give you instructions for emergency treatment options. Often a choke will spontaneously resolve once the esophageal spasm resolves. While awaiting the veterinarian's arrival, you can gently massage the left side of the neck if you can palpate the obstruction. Do NOT ever spray water in the mouth in an attempt to dislodge the impaction. This increases the risk of pneumonia.

Once the veterinarian arrives, the primary goal will be to resolve the esophageal obstruction. Sedatives or muscle relaxants may be given to reduce spasms and tone in the esophagus. A nasogastric tube may be passed and the obstruction gently lavaged with water while the head is lowered, to attempt to break up the obstruction. In cases that cannot be resolved by lavage, intravenous fluids may be administered with muscle relaxants for 24 hours, to lubricate and soften the impaction and correct any electrolyte imbalances. Rarely, esophagostomy (incision made into the esophagus under general anesthesia) is needed to resolve the obstruction.

Once the obstruction is resolved, endoscopy may be recommended to determine if any complications have occurred, to evaluate the condition of the esophagus and to see if a primary cause is present.

### **Post-Choke Recommendations**

Our doctors will advise you about feeding instructions following an episode of choke. We will usually introduce grass and moistened pellets slowly over a 24-hour period and gradually return to a normal diet by 7 – 21 days post-choke. Some horses may need permanent dietary changes if they experience chronic esophageal obstruction.

An anti-inflammatory medication such as phenylbutazone or flunixin is often prescribed in an attempt to reduce inflammation and scar tissue formation, which may predispose a horse to choking again in the future. Depending on the length of time the horse was choked, antibiotics may be prescribed if there is a risk of aspiration pneumonia. The veterinarian will likely ask you to monitor your horse closely for the next few days, watching for a change in demeanor and monitoring temperature.

### **What can you do to minimize your horse's risk of choking?**

1. Feed hay first! Let your horse eat hay for 30 minutes or so to take the edge off his/her hunger. This management practice will also stimulate saliva production which will help reduce the risk of stomach ulcers. Horses that come on from pasture or that have access to round bales are at risk to bolt their feed. Social pressure, such as horses that want to eat their feed before a more aggressive horse chases them away, may cause horses to bolt their feed. Even when stalled separately, horses may bolt their feed, especially if they can see their neighbors.
2. Water – Always provide a fresh source of water for your horse, especially while eating.
3. Teeth – Regular dental care is essential. A horse that cannot chew his feed properly is at a very high risk for choke. This is particularly important in senior horses.
4. Soak feed – Pellets are a common culprit in cases of choke. Horse owners are encouraged to soak pellets before feeding.
5. Try to feed your horse in the same environment every day. Place large rocks or salt blocks in the feed tub to encourage your horse to eat slower, or feed smaller meals more frequently.
6. Treats – Cut into small pieces.
7. Sedation – Withhold feed for at least 1 hour following sedation.