Proceeding of the NAVC
North American Veterinary Conference
Jan. 8-12, 2005, Orlando, Florida

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HOW I TREAT MEGAESOPHAGUS

Alex J. German BVSc PhD CertSAM MRCVS
Department of Veterinary Clinical Sciences
University of Liverpool, United Kingdom

INTRODUCTION

Megaesophagus is defined as esophageal dilatation and dysfunction/paralysis, and pathogenesis is characterized by failure of progressive peristaltic waves. The disease can either be congenital or acquired; congenital cases have been described in a number of breeds, including Great Dane, GSD, Irish setter, and Siamese cats; acquired cases can either be idiopathic, or can arise secondary to an underlying disorder (e.g. neuromuscular disorders including myasthenia gravis, hypoadrenocorticism etc). Esophageal dysmotility is the term used to describe defective esophageal motility without overt dilation of the esophagus (e.g. visible on radiography). The same diseases that cause megaesophagus are also responsible for esophageal dysmotility. The main primary clinical sign of megaesophagus is regurgitation (without pain), whilst secondary signs (pyrexia, coughing, dyspnea, weight loss) may also be present and are usually due to nasal reflux, inhalation pneumonia, and malnutrition. There is no curative medical or surgical therapy for idiopathic megaesophagus and all methods are supportive (see below).

TREATMENT OF THE PRIMARY DISORDER

If megaesophagus has arisen secondary to another disorder, resolution (or at least improvement) might occur if the underlying cause is successfully treated. For example, if hypoadrenocorticism is present, treatment involves steroid (mineralocorticoid and glucocorticoid) supplementation; it is usually the glucocorticoid rather than mineralocorticoid component that is needed for to improve the esophageal dysfunction. In cases that are secondary to myasthenia gravis, the combination of an anticholinesterase (e.g. pyridostigmine) and immunosuppressive medication (glucocorticoids [e.g. prednisone/prednisolone], azathioprine, mycophenolate or ciclosporin) is required. Use of prednisone/prednisolone is controversial, as it may exacerbate muscle weakness and increase the risk of aspiration and subsequent pneumonia. A staged approach to therapy, or use of an alternative drug is often recommended, but prognosis is guarded.

NUTRITIONAL MANAGEMENT

In the majority of cases, and underlying disorder is not detected, and symptomatic therapy is required, the most important component of which is nutritional management. A trial-and-error approach is often required to ascertain the best strategy and, based upon the author’s experience, success is often directly related to the dedication of the client. The following issues should be considered:

Feeding from a height. This approach makes use of gravity, and optimizes passive food transport between oropharynx and stomach. The exact approach adopted depends upon the patient. For large dogs, it is best to raise the food and water bowls to an elevated position. Cats and small dogs can be fed ‘over-the-shoulder’, and can then also be held vertical for a short while after feeding to encourage passage of food to stomach. Some larger dogs tolerate being held up by the front paws (i.e. in a ‘wheelbarrow’ position), for a short period after eating.

Water intake. Although the main long-term concern for the patient is maintenance of an adequate plain of nutrition, it is essential to ensure that water intake is optimal because dehydration is a greater short-term risk. The water bowl can be elevated to assist with water intake whilst, in patients that tolerate liquids poorly, fluid requirements can be fulfilled with ice cubes.

Alter food consistency. The optimum type of food varies between cases. For some liquidized high quality diets are best, for others, wet food or moisturized dry food is suitable. Diet viscosity should also be considered. Diets may be applied either by syringe or as small solid boluses depending on the underlying disease or the preference of the patient or of the owner.

Insure adequate nutrient intake. Patients with swallowing disorders need to be fed for shorter or longer times and depending on the duration of the disease the intake of fluid, energy and nutrients has to be balanced. Ideally, the diet should deliver all required nutrients in a reasonable volume. To maintain the energy balance of the patient high fat diets preferred because his diets provide sufficient energy density.

Assisted feeding e.g. gastrostomy tube. For many diseases (e.g. esophageal stricture and esophageal ulceration, a period of assisted feeding is required whilst the primary disease is treated. Short to medium term assisted feeding can sometimes be of benefit in patients with megaesophagus, since it enables improvements in body condition and gives the patient time to adjust to alterations in oral feeding. Many owners accept to feed animals via such tubes.

Feeding from a height e.g. raise food and water bowls for dogs. Cats and small dogs can be fed ‘over-the-shoulder’. These patients can also be held vertical for a short while after feeding to encourage passage of food to stomach.

Alter food consistency. The optimum type of food varies between cases. For some liquidized high quality diets are best (e.g. Waltham Concentration Diet), for others, tinned or even dry food is better.

DRUG THERAPY?

A number of prokinetic medications have all been tried, with limited success. Metoclopramide and cisapride have a theoretical basis, but are unlikely to work in dogs due toe the presence of striated muscle in the esophagus. Given that part of feline esophagus is composed of smooth muscle, these drugs might be more appropriate, but there has been limited success. Other medication e.g. bethanecol have also been used, but with limited success.

OTHER MANAGEMENT STRATEGIES

Other management. In some cases exercise can provoke regurgitation. Therefore, changes may be required to the daily management of such cases. Animals should be weighed regularly to ensure that food intake is sufficient. Likewise water intake should be monitored closely. Finally, cases should be monitored closely for development of inhalation pneumonia (e.g. anorexia, pyrexia, soft cough, dyspnea), and cases should be treated appropriately.

TREATMENT OF SECONDARY COMPLICATIONS

Prognosis. Prognosis is guarded. There is always a danger of aspiration and subsequent pneumonia. However, some cases in young dogs may recover spontaneously. However, some idiopathic cases in young dogs recover spontaneously, whilst recovery of function occasionally occurs in secondary megaesophagus if the underlying cause is treated.

References available on request.