

The following may address several questions that new folks have asked, in case they haven't had a chance to read the wonderful info in the files and database:

Here is a very brief discussion w/ questions that may be helpful to many new folks:

### 1) **What is megaesophagus, and why are antacids suggested?**

\*\*\*A NORMAL esophagus squeezes the food from the back of the throat, through the chest, and into the stomach. With megaesophagus, part (focal) or all (generalized) of the esophagus is paralyzed. It ends up being a flaccid tube that just allows the food/liquid to sit within the esophagus, and not empty into the stomach. These dogs usually have to be fed and maintained for 15-45 minutes in a vertical position to allow the food and fluid to "fall" into the stomach.

Also, the sphincter between the esophagus and stomach in megae dogs is "lazy" and often allows acidic stomach fluids to reflux (leak back) into the esophagus. Acid is NOT a friend to the esophagus, and will cause burns or ulcers. If the stomach fluids can be made LESS acidic, it is less likely to burn the inside of the esophagus (called esophagitis). In general, every dog needs to be tried on a variety of "antacids" (see a brief explanation of the different antacids at the end of this message). The most successful seems to be Prilosec and Nexium. Chronic decreased acid, however, causes a Vitamin b12 and/or folic acid deficiency, so supplementation is suggested.

It seems to also be to the best interest of these patients to use a "pro-motility" drug; ie. one that will help the stomach empty more quickly into the small intestine, so that the stomach juices have less chance of refluxing back into the esophagus. Usual promotility drugs are metoclopramide (reglan) or cisapride (propulsid) or low dose erythromycin.

### 2) **What is the life expectancy of our dogs?**

\*\*\*Depending on the extent of the megae - is it focal (just part of the esophagus) or generalized (entire esophagus)? Are there other causes (hypothyroidism, Myasthenia Gravis (MG), lead toxicity, trauma, chemical damage, etc.)? Are there other health issues - stomach or bowel disease such as Helicobacter pylori (HP), inflammatory bowel disease (IBD - can only be diagnosed via biopsy, but, is often treated successfully by just suspecting it), etc? How often does the pet develop aspiration pneumonia? How "intense" the treatment must be - ie. some (RARELY seen on this board) dogs require only elevated feedings; others require 4-7 small vertical feedings daily and then require being kept vertical for 10-45 minutes. So, with many of the dogs, especially those belonging to the owners who frequent this board, it depends on how much time the pet owner has to devote to the pet's care. Please remember that the owners of dogs who are EASILY managed, only participate in this board occasionally, because they don't need as much advise.

You will find dogs on this board who have lived a pretty normal length of years. Hobbs, a Wire Haired Fox Terrier, was lost at about 15 years old, from a brain tumor. Bailey, who belongs to Donna and Joe Koch (developers of the Bailey chair), was diagnosed as a puppy and is now 8 years old, and pretty much runs the household with the rest of the "herd."

### 3) **Why do symptoms seem to worsen when they sleep?** Many occurrences happen at night. Is there anything we can do to help?

\*\*\*When the dog is lying down, fluid refluxes back into the esophagus and then can leak into the trachea, resulting in severe irritation not only of the esophagus, but of the trachea and/or lungs. This is were treatment w/ antacids, pro-motility drugs, and/or carafate (an esophagus "bandage") is helpful. Doses can be given during the day, but, most find it best to give a dose of each prior to bedtime (Carafate must be given an hour prior to, or 2 hours after any other meds or feeding, to be effective). Many on the board teach their dogs to sleep w/ their front end elevated (again, perusing the photos can give you some ideas). If the dog sleeps in a crate, one end can be elevated 6-8 inches, and they can be encouraged to sleep w/ their head at the elevated end.

### 4) **What are the signs of Aspiration Pneumonia (AP), so we know what to watch for?**

\*\*\*Sometimes the only signs are lethargy and decreased appetite. If one of these dogs refuses just a FEW meals, or acts lethargic for more than a few hours, it is very advisable to have them evaluated. Coughing,

wheezing, increased respiratory rate, lethargy, etc. are the more common symptoms. Unfortunately, the only way to CERTAINLY rule AP in or out, is with an x-ray. A dvm cannot always HEAR infection within the lungs. Owners may want to request at least 2 x-rays of the lungs - one w/ the dog on it's stomach or back, and one w/ them laying on their side. If only one view is collected, a minor lesion can be missed. A lot of dogs w/ pneumonia cough, or, their breathing sounds "rough," or, gurgly.

Nebulizer administration of drugs, as well as oral antibiotics, etc. are usually used for treatment. Some of the antibiotics (clavamox, especially) can cause nausea, loss of appetite, or vomiting. Those dogs with chronic or recurring AP can be treated using medications administered using a nebulizer.

5) Are there any other **complications** we should be on the look out for?

\*\*\*\*The health of these dogs can be very fragile, so if there are any symptoms that you see that suggest that the pet isn't acting "quite right," evaluation by a dvm is strongly urged. It is a good idea to become familiar w/ the emergency rooms in your area so that you aren't walking in with no knowledge of the the experience or knowledge of the staff.

Many folks copy info from these boards and ask their veterinarian to take a look. Some dvm's welcome the info; some may resent it - tough! YOU are your pet's advocate; the dvm is his quarterback, taking all info and putting it together for what is best for his/her patient.

6) **What should we consider an emergency or urgent?**

- bloody or persistent vomit or diarrhea
- pale or blue-tinged gums or conjunctiva (eye membranes - should be pink)
- stumbling, incoordination, weakness
- continuous coughing for more than 1/2 hour, or breathing with head extended (hard time getting oxygen)
- foam coming from mouth or nose

IF FOR ANY REASON YOU ARE CONCERNED ABOUT ANY SYMPTOMS THAT YOUR DOG IS SHOWING, PLEASE RUSH TO YOUR DVM OR TO AN EMERGENCY ROOM. THE HEALTH OF THESE DOGS IS VERY FRAGILE. THE SOONER TREATMENT COMMENCES, THE BETTER. BETTER A WASTED TRIP, THAN A SEVERELY ILL DOG. Once you become familiar w/ the symptoms of AP, you may ask you dvm for a supple of antibiotics to start w/ the first signs. They mustn't be given for only for a few days, but, usually for 4-6 weeks. Giving them for too short of a time may result in resistance.

7) What are some **medications** that are used for treatment?

- i. Sulcrate (carafate) - liquid or tabs - "bandage" for ulcers/erosions in esophagus/stomach
- ii. Tagamet (cimetidine), Zantac (ranitidine), Pacid (famotidine), Prilosec (omeprazole), Nexium (esomeprazole) - Prilosec and Nexium work best if NOT sprinkled on the food, but, given in the capsule (most listers have found it to work either way). All but Nexium are available OTC - need to experiment w/ what works best for your dog
- iii. Pro-motility drugs (help open up the sphincter between the stomach and small intestines, allowing stomach contents to more quickly enter the small intestines, so that it is less likely to reflux back up into the esophagus:
  - a. reglan (metoclopramide) - oral tabs & liquid - helps w/ nausea; helps stomach empty - some megae dogs seem to be very sensitive to the neurologic side effects (restlessness, panting, nervousness)
  - b. Cisapride (Propulsid) - helps with reflux (most specialists do not feel it works/experience suggests that it does in many mega-e pets). Currently only available through compound pharmacies
  - c. low-dose erythromycin - NOT used as an antibiotic

**Antibiotics** frequently used for aspiration pneumonia (AP) -

- a. Baytril - pills & injectable
- b. Clavamox - pills and oral liquid (frequently cause nausea) - can give metoclopramide one half hour prior, to "settle stomach"

- c. Azithromycin (Zithromax) - capsules and oral liquid - very expensive/powerful. Usually give for 5-10 days, but, has activity for 10-14 additional days. Usually saved for severe cases, or ones that may have been treated w/ other antibiotics and for which a resistance may have developed.
- d. cephalexin (Keflex)
- e. amikacin or gentocin can be administered via nebulizer

**Here is a "typical" protocol for megae dogs:**

- 1) Feed 4-5 times daily w/ the dog's body perpendicular to the floor so food "falls" through the esophagus into the stomach
- 2) administer a dose of metoclopramide (or, cisapride) 15-30minutes hour prior to eating
- 3) administer antacid w/ the meal (once daily if prilosec or nexium - at night; 2-3 times daily if zantac or pepcid w/ one of the feedings)
- 4) administer carafate ("bandage" for ulcers or erosions in esophagus or stomach) 2 hours prior to bedtime
- 5) administer antacid right before bed to minimize acid in stomach, so if reflux from the esophagus occurs from the stomach while the dog is laying down, it is not as acid. Antacids are SUPPOSED to be given on an empty stomach, but, most owners report help even if given WITH food.

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(I have not examined your pet, therefore there is no patient-veterinarian relationship. Any suggestions mentioned are meant for you to share with your veterinarian, and as a way of opening a dialogue for continued successful treatment of your pet. Please do not change medications without consulting with your dog's veterinarian. If there are any concerns about the welfare of your pet, please consult with your dvm or an emergency room, as these patients can very quickly deteriorate).