

At home management of heart failure patients: tips for clinicians and clients

Meg M. Sleeper VMD, DACVIM (cardiology)

Professor of Cardiology; University of Florida School of Veterinary Medicine

1. Always titrate furosemide to the lowest dose that controls clinical signs.
Once the patient is out of congestive heart failure and is clinically normal, it is important to gradually taper furosemide to the lowest dose that maintains the resting respiratory rate in the normal range. The process should be gradual and it is important that the owner thoroughly understands the process. For example, if a 10 kg dog is sent home (after hospitalization to stabilize congestive heart failure) on 20 mg furosemide 3 times a day, after 3 days of the owner obtaining regular resting or sleeping respiratory rates the dose can be decreased to 20 mg twice daily. If there is no change in the breathing rate after 5 days, the dose can be further reduced to 12.5 mg twice a day and potentially again to 10 mg twice daily in another 5 days if there is still no change in the breathing rate. The owner should carefully monitor the breathing rate throughout this process so if there is an increase in the RR, they can increase to the last furosemide dose used.
2. Keep in mind the variable forms in which furosemide is marketed so that it is easier for the owner (and you) to choose the lowest possible dose. In addition to the veterinary products (12.5 and 50 mg), the human product comes in a 20, 40 and 80 mg size tablet. Also, there is a pediatric elixir (10 mg/mL), which can be very helpful for dosing small patients.
3. In general, when dosing furosemide, it is better to increase frequency of administration rather than mg per dose. The drug is active for approximately 6 hours when administered orally.
4. In some dogs with refractory congestive heart failure, drug absorption is suboptimal and added a dose of injectable (subcutaneous) furosemide can be very effective. Torsemide is another loop diuretic that can be helpful in dogs with refractory heart failure.
5. Consider compounding pharmacies. Although there are certainly issues that arise from time to time with compounding pharmacies, for some they offer a service that will significantly improve the quality of life for the pet and owner. Absorption of cardiac medications is questionable with transdermals and cannot be easily monitored as can transdermal methimazole. However, for the elderly patient that has trouble remembering multiple pills to administer or the pet that is difficult to pill, combining multiple drugs into one compounded liquid or tablet can have a

significant impact. Because of uncertain absorption I use transdermal cardiac medications as a last resort.

6. Recommend that owners maintain a logbook of their dog (or cat's) resting or sleeping breathing rate. In my experience, this has been the single best way to avoid fulminant heart failure emergencies. It is also helpful in those patients in which coughing is a chronic problem, but not necessarily related to congestive heart failure.
7. Monitoring the heart rate can be a difficult skill for owners to master, but can be very helpful, particularly in patients with atrial fibrillation. Although the 24 hour Holter monitor remains the gold standard for rhythm monitoring in the home environment, there are various other systems now available that may be reasonable options.
8. Nutritional considerations such as monitoring electrolyte status and supplementation with omega-3 fatty acids are often overlooked.