**INTRODUCTION**

This FAQ will help you teach your clients to use Sleeping Respiratory Rate for home-monitoring of heart failure.

**References**

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**CLINICAL USE INFORMATION**

**Resting Respiratory Rate**

- **Why monitor SRR?**
- **How is it done?**
- **What is the normal SRR?**
- **What else should owners look for?**
- **What do I do if SRR is high?**

**Why monitor SRR?**

Owner participation in assessing and recording of Sleeping Respiratory Rate is:

- Probably the most sensitive indicator of developing pulmonary edema or pleural effusion in dogs and cats.
- A very useful home-monitoring technique for owners to perform.
- Used once a diagnosis of CHF has been made (and is now controlled), or where substantial heart disease exists and is likely to result in CHF at some future stage.

In addition to being a great home monitoring aid, involving the owner in this process helps overcome the "need to do something" that many owners and veterinarians exhibit when dealing with heart disease.

**How is it done?**

Have the owner record the sleeping respiratory rate and character on their pet (number of breaths/min). The recording should be done when the animal is comfortably resting or asleep, in a thermo-neutral environment (i.e., not too cold, not too hot). This should be repeated daily for 2-3 days (to get a baseline variation), and then once or twice weekly.

If the SRR changes substantially between measurements, the owner should then measure daily to confirm the change, or to document a trend. If a trend is documented, the owner should contact the veterinarian for further evaluation.

**What is the normal SRR?**

**Normal SRR** in dogs and cats is <30 breaths/min, often in the high-teens or low 20s. Consistent SRR >30 breaths/min in patients with underlying heart disease is strongly suggestive of developing CHF. However, primary respiratory disease with concurrent subclinical heart disease needs to be ruled out.

**What else should owners look for?**

Cats often have very subtle changes in demeanor or respiration prior to fulminant CHF.
Changes in appetite or activity or loss of weight in cats with known heart disease are often warning signs that CHF is imminent.

Coughing is a variable finding in CHF in dogs, and is not a feature of CHF in cats.

What do I do if SRR is high?

If SRR is elevated, thoracic radiographs and physical examination should be performed. If there is no clear evidence of CHF, a short diuretic trial can be employed (lasix @ 2mg/kg BID for 3-4 days). A reduction in the RRR to baseline with therapy further supports mild CHF.

Presence of sinus arrhythmia or sinus bradycardia is inconsistent with a diagnosis of CHF - nearly all animals with CHF will have sinus tachycardia.

REFERENCES

Associate and Books
1. Congestive Heart Failure.
2. Treatment of Congestive Heart Failure.

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