



## **Chronic Coughing in Dogs**

drip 2

version 1

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When we talk about chronic coughing, the general definition of chronicity is that it has to be going on for two months or longer. And we will initially chiefly characterize coughs as being productive. So there is a moist and low-pitched sound to them, versus being non-productive or dry high-pitched and harsh.

It's really important that we teach our credentialed veterinary technicians and veterinary nurses to ask that question about the productivity of the cough because it does help one travel down different differential pathways when trying to come up with a list of possible underlying etiologies.



When I'm doing coughing, a chronic coughing consultation, I have a very specific way that I approach them. I have developed this way because it's worked for me, it's how I was taught, and it's akin to evaluating radiographs. You do it the same way every time. By doing that, you minimize the likelihood of missing something.

The first thing I will do as part of a physical examination in a chronic cougher is stand back. I'm going to watch them, and I'm going to listen to them. I'm going to breathe with them to see if there's any distinguishing respiratory pattern. Are they putting more effort into breathing in? Are they taking more time to breathe out? Do I hear abnormal sounds? For example, stertor, which tells me there's a problem in the nasal pharynx, or do I hear stridor, which is preferable to the larynx?

Then I'll obtain vitals if one of my team members hasn't already done that. And this goes back to that issue of trying to differentiate cardiac causes of coughing from respiratory causes of coughing.

In general, cardiac causes of coughing are associated with normal to decreased body temperatures, while respiratory causes of chronic coughing are associated with normal to potentially elevated body temperatures. That is not set in stone, and there are certainly deviations from that rule.

But if I see a chronic dog come into me for chronic coughing and their body temperature is 98.2 Fahrenheit, I'm going to be thinking about cardiac causes first as an underlying etiology compared to the chronic coughing dog that comes in with a temperature of 102.4 Fahrenheit. For that patient, I'm not going to have a high index of suspicion for cardiac causes when their temperature is at the high end of the normal reference range.

Then I'm going to look at the nose. Remember that nasopharyngeal disease can be a meaningful cause of chronic vomiting through a postnasal drip, for example. So we want to make sure that there's no asymmetry to the bridge. We want to make sure that airflow through each side is adequate.

There are different ways that people will assess each nasal passage. Some will put cotton in front of each one while including the contralateral side. Some will put a glass slide and look for the, quote-unquote "fog" to appear. In an amenable dog, I like to occlude one nostril at a time and put the open one right up next to my ear where this skin is really, really sensitive and feel for the air movement through that nasal passage that I'm assessing.

Then we put on the stethoscope. And it's really important to do a thorough auscultation. I would encourage you to always listen for the soft sounds first and then listen for the louder sound. So that means do your heart auscultation first and then listen for airways, including at the thoracic inlet.

The last thing that you do is palpate the trachea. Why is this the last thing? Because if you've done this early in your presentation, you probably know that you could set off a meaningful coughing episode that makes you have to deviate from your typical physical exam plan. So my piece of advice is to perform the tracheal palpation looking for sensitivity? Do you induce a cough with tracheal palpation? Do that last.



When do you palpate your patient's trachea as part of a complete physical examination?

At the beginning of the exam
At the end of the exam
It varies
I'm supposed to palpate the trachea?

It's now time for poll question number 1. So when do you palpate your patient's trachea as part of a complete physical exam? This is just making sure you're listening. And it is a meaningful bit of advice. I have had to abort physical exams because I have palpated too early.