

MY (CURRENT) THOUGHTS ON ORASTRIP™

Another relatively new product on the market is called OraStrip™. This is a colourmetric test strip that detects the presence of thios. Thios are organosulphur or volatile sulphur compounds that are produced by the pathogenic bacteria commonly associated with periodontal disease in dogs. While these compounds add to the destructive potential of periodontal disease, they also may potentially allow us to detect periodontal disease much earlier than has been common to date.

Let us back up a bit and acknowledge a few important facts. First, periodontal disease is by far the most common health issue in pet dogs. With the exception of those dogs who have already had all of their teeth extracted and the smaller population who are receiving excellent preventative dental care (professionally and at home), almost every mature pet dog has some degree or form of periodontal disease.

One of the biggest challenges in managing periodontal disease in dogs is that most people assume that periodontal disease can be assessed by looking into the mouth of a conscious patient and that if the crowns of the teeth look clean, then there is no periodontal disease. This is a very dangerous fallacy. Periodontal disease has almost nothing to do with what you can see on the crowns of the teeth. Periodontal disease is happening below the gum line, hidden from view in the conscious patient. By the time you can see evidence of periodontal disease in a conscious dog, it is advanced and has been going on for a long time. For more on this, I would encourage you to review these papers from our website:

[Why Is Periodontal Disease So Common](#)

[Periodontal Disease is Hidden](#)

[You cannot prevent what has already happened](#)

So, if periodontal disease is hiding below the gum line and if we have to act before there is visual evidence of periodontal disease BUT, this requires general anesthesia and many owners are reluctant to proceed if they perceive no evidence of disease, how do we break this impasse? How

wonderful it would be if we had a simple diagnostic test that would detect early periodontal disease in the exam room quickly and accurately so that we can confidently state that it is time for a Comprehensive Oral Health Assessment and Treatment ([COHAT defined](#))! This is (possibly) where OraStrip™ may come in.



Before I can fully endorse the routine use of OraStrip™, there is some research I need to see. Some of it has been done (Manfra Marretta S, Leesman M et al; Pilot evaluation of a novel test strip for the assessment of dissolved thiol levels, as an indicator of canine gingival health and periodontal status. CVJ, Vol 53, Dec 2012, pp 1260-1265) and more is apparently underway. We need to know two things in particular:

- is the test sensitive? Will it actually detect early periodontal disease so we can intervene when the condition is still manageable and before the patient has been suffering in silence for a long time? We want to know that there will be no false negatives.

- is the test specific? If we anesthetize a patient for a COHAT based solely on the results of the test, will we actually find periodontal disease that needs treatment? We want to know that there will be no false positives.

The research I have seen so far certainly suggests that the test can be a useful tool, but I have not seen both of these answers specifically

laid to rest quite yet. I am hopeful that we will see such credible evidence soon.

Before I go further, it is important to note, that even if OraStrip™ ends up being highly sensitive and specific, it will only be detecting evidence of periodontal disease. It cannot be expected to detect endodontic disease, tooth resorption, tumors, cysts, anatomic and developmental problems and so forth. There are many other indications for performing a COHAT even in the absence of any evidence of periodontal disease. A negative OraStrip™ result does NOT mean there is no dental pathology, just that there may be no periodontal pathology. There are many other indications for doing a COHAT besides periodontal disease.

If OraStrip™ lives up to its promise, how might we utilize this resource?

The obvious use is at the annual wellness visit to look for the first signs of early periodontal disease to trigger the patient's *first* detailed periodontal assessment and treatment followed by establishment of a safe and effective daily plaque control program.

Another use is in helping to determine when to schedule the patient's *next* COHAT. We frequently say that periodontal patients should have annual COHATs but there is nothing magical about 365 days. For some patients, this interval is too long; for some, we can get away with a longer interval. Since periodontal disease is hidden, how do we decide when the next treatment is indicated? Doing an OraStrip™ test every six months could be a great way to ensure that we are neither over-treating nor under-treating our periodontal patients.

I will be watching with great interest as the results of more studies are made known and will keep you up to date. I really hope this pans out.

By the way, OraStrip™ can be ordered from www.drshipp.com. I order various things from them a few times a year and they are very quick and reliable. I have never had any cross-border issues.