

## **“CUPS” Chronic Ulcerative Paradental Stomatitis**

Chronic Ulcerative Paradental Stomatitis, or CUPS, is a painful and often debilitating disease of the mouth involving the gums, mucous membranes, and tongue. In most cases the inflammation has been going on for months if not years. CUPS has also been called *idiopathic stomatitis*, *trench mouth*, *lyphocytic-plasmacytic stomatitis complex*, *ulcerative stomatitis*, *St. Vincent’s stomatitis*, and *necrotizing ulcerative stomatitis*.

There is often a profound amount of inflammation at the gingiva, the buccal and palatal mucosa, lip margins, and tongue epithelium. It is common to find significant ulcers on tissue that comes in contact with the teeth; these are called “*kissing lesions*” or “*kissing ulcers*”.

### **What causes CUPS?**

While the exact cause of CUPS is variable, it can be unclear what specifically triggers it for each dog. Trauma such as electric cord injuries or caustic substances can damage the oral tissues and lead to stomatitis conditions. Due to overrepresentation in certain breeds such as greyhounds, Cavalier King Charles Spaniels, Maltese, and Huskies, there may be a genetic component.

In the majority of cases it is believed that the dog’s immune system is overreacting to bacteria in plaque. The bacteria cause an antigenic response due to the chronic exposure of the pathogens to the immune system. Normally the immune system keeps this in check, but in dogs with CUPS the response is exaggerated. In patients with periodontal disease, the amount of plaque and calculus present can be substantial.

### **What are other conditions could look like CUPS?**

Animals with CUPS will often have periodontal disease, but the majority of dogs with periodontal disease do not have CUPS. Severe gingivitis without inflammation in the other tissues does not support a diagnosis of CUPS. It is important to rule out other immune-mediated diseases such as pemphigus. Uremia due to renal disease can often present with oral ulceration and halitosis. Some oral neoplasia may also present with inflammation and ulceration.

### **What are the signs and symptoms of CUPS?**

As mentioned above, there is marked inflammation and often ulceration of the gingiva, oral and buccal mucosa, and tongue. The lymph nodes may be enlarged due to chronic reactivity. Oral pain, ptyalism (excessive salivation), halitosis, oral hemorrhage, decrease appetite, and difficulty grabbing or chewing food are common findings with CUPS. Some animals will have lost weight.

Blood chemistry profiles are variable. The most consistent finding is a hyperglobulinemia due to chronic inflammation. Other abnormalities may be found independent of or related to CUPS.

### **How is CUPS Treated?**

The treatment plan for CUPS should be individualized based on the severity of the disease, owner's commitment to home care, the dog's personality, and financial concerns. Every dog with CUPS should have a comprehensive oral health assessment under anesthesia. That includes scaling and polishing the teeth to remove the plaque and calculus, periodontal probing of each tooth, and intraoral dental radiographs.

Many dogs require at least some extractions due to periodontal disease. With the teeth that remain it becomes imperative that the owner brush the teeth at least once a day. After cleaning or home brushing, bacteria start forming a layer of plaque within hours. Since plaque is what is causing or contributing to the inflammation the plaque needs to be eliminated as much as possible. Meticulous daily brushing at home in combination with pain relievers, oral rinses and more may be needed. Home care and frequent veterinary cleanings and evaluations are necessary to keep to inflammation down.

If brushing everyday is not possible or if the inflammation and pain recurs even with daily brushing it may be necessary to extract all or most of the dog's teeth. This may sound drastic, but the dog is usually in so much pain that they actually feel better a day or so after the extractions. Some painful anorexic dogs we have treated with full mouth extractions started eating ravenously after surgery that evening! The goal is not just to remove the teeth, but also remove the ulcerations, inflamed and painful tissues. All alveoli are curetted free of debris and smoothed by odontoplasty to improve patient comfort.

Since today's dogs no longer have to hunt and kill their prey to eat, they don't need the teeth to capture prey or to eat. The kibble or canned food comes in nice small pieces that can be readily swallowed by the dog. It may take a little time to adjust to being toothless, but the dogs tend to do very well since there is no longer any pain.