Tooth Resorption in Cats

You have brought your happy, healthy 7 year old cat, Sylvester, to the vet for his annual exam. All looks great on the outside, but during his exam, the vet has mentioned that she noticed some dental disease, including a couple of resorptive lesions. What she is seeing may look like a small hole or erosion just along the gum line of the tooth, and the gums around the affected teeth are noticeably red and inflamed.

The concern is that these holes can progress to be quite large, and will gradually consume the tooth. Radiographs are the only way to definitively diagnose resorptive lesions originating below the gum line. It is when Sylvester is anesthetized for his dental cleaning that the gum line and tooth surfaces will be probed, and radiographs will be taken of his entire mouth, so as to detect any hidden resorption occurring below the surface of the gums.

Clifford, a 5 year old male DSH:

Pre-op appearance of tooth resorption involving the crowns of the lower canine pre-molar.

In Cliff’s case, resorption was progressing rapidly and radiographs revealed some other teeth were also resorbing from beneath the gums. Originally, the only visible lesion was a pinpoint hole on the canine pictured above. Over a two month period, the lesion grew to what is shown above, and lesions emerged on two more teeth. A total of eight teeth were extracted.

Did you know that upwards of 60% of cats over 6 years of age have at least one resorptive lesion? It is also very likely for cats who have had one or two resorptive lesions to develop the condition on some or most remaining teeth later in life. When radiographs are taken during a dental, the x-rays may reveal other teeth with lesions developing at the root level. Tooth destruction can occur from the inside out as well as moving from above the gum line down into the root. It is advised to extract these teeth as well, to avoid inevitable pain and tooth destruction. There is a point at which resorption will have progressed so far that there is little to no tooth remaining, and what remains is not creating a problem, so there is no need to do any additional extractions.

Tooth resorption will typically start in the cementum of the tooth, which is the bonelike layer of connective tissue covering the tooth roots. This is what the ligaments surrounding the roots hold onto to keep the tooth securely in place.
When the resorptive process begins, it can progress either downwards through the roots and supportive alveolar bone, or it may go upwards through the dentin and the crown, presenting early on as defects in the enamel. Resorptive lesions can go unnoticed for a long time, and sometimes teeth have fully resorbed before anyone notices, particularly if the process is occurring beneath the crown and gum line. Cats are stoic, and may not show signs of discomfort, even if an aggressive resorptive lesion is eating away at a tooth.

**Stage 1:**
Loss of enamel only, extending less than 0.5 mm into the tooth.
Stage 2: Lesion extends into the dentin.

Stage 3: Lesion extends into the pulp canal, but good tooth structure remains.
Stage 4:
Lesion extends into the pulp canal and there is extensive loss of tooth structure.

Stage 5:
Crown of tooth is missing, but roots are present.
Feline Stomatitis

Stomatitis is severe inflammation and/or ulceration of the oral mucosa, and is a debilitating disease for affected cats. Foul breath, difficulty in eating and drooling are typical clinical signs. Some patients experience raw and painful areas in their oral cavity. This condition requires aggressive treatment, typically involving surgical extraction of all teeth, or at least those behind the canines.

Veterinary dentists do not know for sure what causes stomatitis in cats. The current thought is that it is a mutation or variant of calici virus, but that has not been definitively proven. What is known, however, is that it may be selectively contagious between cats. Most cats that are exposed to this will not develop stomatitis. Cats with an already depressed immune system are more likely to develop this painful condition. As stomatitis develops, the immune system overreacts to plaque in the mouth and attacks the soft tissue of the gums. By suppressing the immune system with antibiotics and steroids, the disease process can be slowed, but it is unusual that a cure can be obtained without oral surgery.

Although some cats respond to medical treatment, along with meticulous at-home oral hygiene, most cats require extraction of most or all of the teeth. Although this may seem extreme, it can provide the best long term solution to an otherwise painful problem. Cats that do not respond completely to extraction of all teeth can often be managed by medical treatment as needed.

http://www.allfelinehospital.com/stomatitis.pml;
*Images above are borrowed from publicly accessible client educational resources available through the American Veterinary Dental College at www.advc.org.
Recommendations Adopted by the AVDC Board. Further references can be found at the following webpage: http://www.avdc.org/nomenclature.html  Documents most recently updated May 2012.