

Oral hygiene, animal vitality

Periodontal disease (gum disease) is probably the most common disease in dogs and cats, says **Dee Fleming** of the Pride Veterinary Centre, Scarsdale Veterinary Group, Derby

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Some 80% of dogs over the age of three and 85-95% of cats over two have some form of periodontal disease. Between 25% and 75% of cats are estimated to have tooth resorption, a destructive disease that starts within the tooth root and with time extends to the crown, resulting in fracture. The cause is not known but some forms of tooth resorption may be associated with periodontal disease. These are the two most commonly encountered dental conditions in small animal practice – there are many more.

Dental and oral disease in its various forms is a source of much discomfort and pain. Often disease is associated with infection which can be severe. Animals can have a bacteraemia (bacteria within the blood) and those with severe disease should be considered to be systemically unwell. Advanced gum disease (periodontitis) may also be linked to other clinical conditions such as cardiovascular and kidney disease. Dental disease can result in the loss of animal vitality.

Dental disease is often ignored or neglected, however – 'out of sight, out of mind'. Animals will carry on with life and continue to eat apparently normally despite significant disease in many cases and owners may not feel their pets' dental disease is an issue. SQPs as part of the animal health care team can help change this situation by giving good advice.

Plaque is the cause of periodontal disease and some other inflammatory conditions within the oral cavity.

Plaque is a sticky collection of bacteria (a biofilm) which adheres to the tooth surface. If plaque is not removed it becomes mineralised to form tartar (or calculus) – a perfect surface for more plaque accumulation. Plaque can cause gingivitis (inflammation of the gums).

Gingivitis is reversible but if left untreated may progress to periodontitis. Periodontitis is an irreversible inflammation and destruction of the tooth support structures and leads to tooth mobility, infection and tooth loss. Plaque is the enemy when fighting dental disease.

BRUSHING IS BEST

The gold standard for the prevention of plaque accumulation is daily tooth brushing. If anything was better, we would be using it ourselves!

Most dogs and some cats will tolerate regular tooth brushing. Owners need education and advice. Puppies and kittens should have their mouths handled daily and brushing can be introduced from six months of age. A vet or qualified veterinary nurse interested in oral hygiene should be consulted regarding correct and safe technique. It should be introduced gradually and without force. Tooth brushing is most effective performed once daily with a pet toothpaste and bristled pet toothbrush. Finger brushes can be used

for training. Cotton buds or gauze can be useful in cats. Pet toothpastes often contain flavourings to increase acceptance and some contain ingredients that may help to inhibit plaque formation. Tooth brushing less than three to four times per week will not be sufficient to prevent plaque and tartar accumulation.

Tooth brushing should not be attempted in animals with a tendency to bite.

Tooth brushing may not always be possible, especially in cats, or is often not done as frequently or as well as it could be. There are other effective aids to oral hygiene in these cases. They are not as effective as tooth brushing. They should be seen as the next best alternative or adjunctive treatment to be used alongside brushing rather than an equivalent.

PLAQUE CONTROL

Chlorhexidine is the gold standard agent for chemical plaque control. Products containing Chlorhexidine should be at the top of the list of oral hygiene options. These should be applied directly to the teeth and gums with the applicator provided, a gloved finger, a cotton bud or using a syringe (for liquids) once daily for best effect. They may however taste unpleasant and can stain the teeth. This stain is not permanent though and can be removed via scaling.

An enzyme complex is the active ingredient within some other products. Again, these are most effective if applied directly to the teeth and gums once daily.

Many animals tolerate these products well – some perhaps too well and lick

them off before they can work.

There are a number of dental diets and dental chews which have been shown to reduce the amount of plaque and tartar formation and may reduce the incidence of dental disease. These have enhanced textural and shape characteristics to encourage physical removal of plaque. Some may also contain zinc salts which have antibacterial properties and the ability to inhibit plaque, polyphosphates that bind calcium and decrease tartar and antioxidant polyphenols.

“Advanced gum disease may also be linked to other clinical conditions”

Dental diets are most effective if fed exclusively but can be expensive, and feeding them as a proportion of the daily intake may be better than not feeding them at all. Dental chews need to be chewed! Some animals will devour them in one or two bites to no effect other than weight gain. Some chew toys can be very helpful, although their use is a little controversial as fragments of such products may break off and result in intestinal obstruction. Instructions must be followed and supervision is needed when in use.

Some products claim to be effective in reducing plaque if applied to the paws for animals to lick off, or added to their food or drinking water. While these are easy to use, the evidence for their effectiveness is generally lacking or dubious. This should be borne in mind. They may be of some use in animals that will not tolerate other forms of oral hygiene.

The Veterinary Oral Hygiene Council (VOHC) is a body made up of a number of veterinary dentists from around the globe. Look out for the VOHC Seal of Acceptance on products.

With good oral hygiene a significant amount of dental disease can be prevented – dental disease that causes infection, pain, systemic illness and loss of vitality.

DIRECT PETS TO VETS

Any animal owner seeking advice on oral hygiene and reporting concerns about dental health in their pet should be directed to a veterinary surgeon. A conscious health and dental check will be required. Often a thorough dental examination under general anaesthesia is needed. Extractions may be required and often a professional scale and polish needs to be performed before home oral hygiene measures can be instituted or effective.

As SQPs, having an understanding of dental disease, the need for professional treatment and knowledge of the best oral hygiene options, you can help to prevent probably the most common clinical condition in dogs and cats.

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