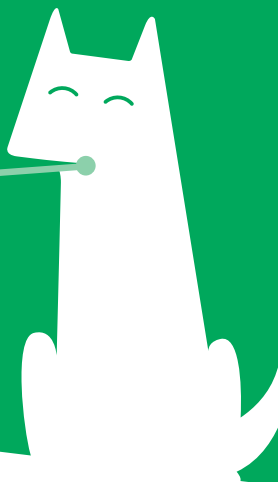


Teeth and oral health



CATS PROTECTION
VETERINARY GUIDE 14



Cats commonly suffer with disorders of the teeth, the jaw and the soft tissues of the mouth. Owners may not notice their cat is in pain because they hide signs of discomfort so well and may continue eating and drinking normally. Following treatment for teeth or oral problems, cats usually appear to be much livelier and happier – it is clear that oral health problems can be a significant source of pain and suffering for our feline friends. Maintaining good oral health is likely to extend and improve the quality of your cat's life.

Your vet will often examine your cat's mouth at their annual check-up, although further procedures may be necessary to fully assess any issues. You may be surprised by the severity of teeth problems your cat may be hiding. More obvious signs of oral health issues include:

- reduced grooming activity, leading to poor coat condition
- bad breath
- drooling
- discomfort when eating
- pawing at the mouth
- bleeding gums
- reduced appetite or weight loss

All these symptoms will warrant a specific trip to the vet.



The teeth

Kittens have 26 baby teeth which are replaced by 30 adult teeth by the age of six months. Cats use their teeth for catching prey and to defend themselves against other cats or predators, as well as for chewing food. Each tooth sits within a space in the jaw bone and is held in place by tough periodontal ligaments. Teeth are made up of:

- an outer mineralised section
 - enamel covers the crown section – the white part seen visually in the mouth
 - cementum covers the hidden root sections – the parts embedded in the jaw bone
- an inner dentine, which surrounds the entire pulp cavity which contains the sensitive nerve and blood supply to the tooth

Tooth eruption

It is common for there to be some mild gingivitis with inflammation of the gum and bad breath when the adult teeth emerge, but this does not usually affect a healthy kitten's appetite or behaviour and should quickly resolve. However, problems can occur when some of the baby teeth do not fall out and they may need to be extracted.

Cats may also encounter problems when their teeth erupt too closely together, or they develop too many or too few teeth. Irregular shape, structure or position of teeth can also cause issues. These problems may be inherited and can lead to the development of periodontal disease.

Tooth fractures

Cats which have suffered trauma, such as road traffic accidents or falls from a height, commonly suffer fractures to their teeth. The long, sharp canine teeth are the most frequently affected and if the sensitive pulp cavity is exposed they will usually need to be extracted – root canal treatment and crown repair techniques are rarely used in cats.

Tooth wear

Occasionally some cats will develop excessive wear of their teeth which may necessitate extraction.

Tooth resorption

One of the most common dental disorders found in cats is the development of resorptive lesions of the teeth. These lead to the tooth's structure being actively broken down and reabsorbed by cells within the teeth.

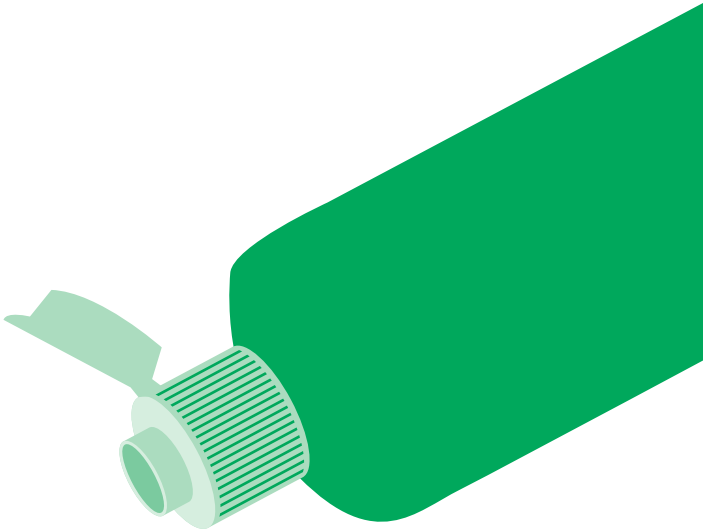
Lesions can be seen in cats of all ages – though the presence and number of teeth affected increases with age. This disease usually affects the back molar and premolar teeth – often happening on both the left and right sides in a symmetrical fashion.

The underlying cause is currently unknown, but the disorder shows up as defects in the calcified substance of the teeth. Ultimately it leads to damage to roots, enamel loss and tooth fractures.

When enamel is lost at the gum margin, the disorder is very painful. Signs include head shaking, drooling of saliva and discomfort when chewing. When the tooth is examined, the

surrounding gum line is usually red and there is often a deposit of red, inflamed tissue covering the defect. If touched, it often causes the cat to 'chatter' their teeth.

Any affected teeth will need to be extracted. The defects can't be filled, as the resorptive process is ongoing and unfortunately there is no way to stop other teeth becoming similarly affected. Regular monitoring of the remaining teeth is therefore recommended.



The jaw

The lower jaw comprises two mandible bones which are joined by a soft tissue junction in the middle. This hinges with the upper jaw – made up of two maxillary bones – at the temporomandibular joint. The root of each tooth is anchored into the jaw and is held in place by tough periodontal ligaments.

Jaw fractures

Fractures of the jaw are often caused by traumatic incidents and the weak junction of the two mandibles is a common site of injury. An injury like this affects the soft tissue union of the two bones, rather than the bones itself, so it is not strictly a fracture. However, the condition causes pain, jaw instability and difficulty with eating and usually requires wire implants for repair. Affected cats often recover extremely well.

Fracture of the mandibles – or lower jaw bone – will usually require more complex surgery. Cats with advanced kidney disease may develop softened facial bones and are more at risk of fractured jaw bones, particularly during procedures such as dental extractions. Traumatic incidents, such as falling from a high building, can also cause defects to the hard palate in the roof of the mouth which can be more difficult to repair and may require referral to a specialist surgeon.

Osteomyelitis

Infection and inflammation of the bone often follows trauma when bacteria are introduced into the jaw bones. Affected cats may require surgical treatment as well as a long course of antibiotic treatment. Osteomyelitis may also result from long-term periodontal disease – read more about this below.

Periodontal disease

Periodontal disease refers to inflammation and weakening of the tissues which surround and support the teeth – including the gum, the periodontal ligament securing the teeth in place and the jaw itself.

It causes the development of pockets around the tooth, inflammation and resorption of bone and can ultimately lead to tooth loss. It is usually caused by bacteria – or plaque – in the mouth. Plaque is always present in the cat's mouth and can become excessive or cause disease for a number of reasons including:

- reduced natural cleaning of the teeth – due to poor positioning of the teeth, tooth loss or dietary effects
- increased inflammation of the gums – due to trauma, hair impaction or other disease
- reduced natural body defences – due to inherited defects of the immune system or other disease – such as kidney or liver disease, diabetes or viral infection

Deposits of saliva and plaque lead to tartar building up on the teeth leaving a rough surface which can cause further build up of plaque. Tooth extraction is used to treat advanced periodontal disease.

If the problem isn't too severe, the vet will clean the teeth above and below the gum line while the cat is under a general anaesthetic and polish them to leave a smooth surface. Combined with dental home care and regular check-ups, this can be an effective treatment for mild cases.

It is important that periodontal disease is managed to control any discomfort, prevent tooth loss and to ensure overall health and welfare. An inflamed and infected mouth can aggravate other disease elsewhere in the body.

Disorders of the soft tissues of the mouth

Problems with the mouth can also stem from viral infections which lead to ulceration of the gums, tongue and palate – see Cats Protection's *Veterinary Guide: Cat flu*. Other causes include wounds from cat fights, benign and cancerous growths and foreign bodies. However, perhaps the most common are gingivitis and feline chronic gingivostomatitis (FCGS).

Gingival recession or gingivitis

Gingivitis is inflammation of the gums and if allowed to progress it can lead to the gums receding and loss of teeth. It occurs due to bacterial plaque in the mouth and is usually found where the gum meets the tooth. Mild gingivitis is common, especially in kittens when their adult teeth are coming through. Dependent on the extent and cause of the gingivitis, treatment may include antibiotic and/or anti-inflammatory treatment, dental treatment under general anaesthetic and home care management. A good diet, dental hygiene and routine dental treatments help to prevent or control gingivitis. Left untreated, it can progress to periodontal disease and tooth loss.

Feline Chronic Gingivo-Stomatitis (FCGS)

A small proportion of cats suffer from a more serious inflammation of the mouth. This painful condition varies in severity but can lead to bleeding, ulceration, infection and even growths in the mouth.

It is thought there may be three main contributing factors involved in FCGS:

- a reaction to bacterial plaque on the teeth
- a poorly functioning immune system – possibly due to other diseases or infection with viruses that affect the immune system, such as feline immunodeficiency virus (FIV)
- other underlying viral infections, such as feline calicivirus (FCV)

It results in the cat's immune system responding excessively to plaque problems – associated with gingivitis, periodontal disease or resorptive lesions – and leads to chronic inflammation.

Treatment involves trying to eliminate the bacterial plaque infection which triggers the cat's excessive immune response. Antibiotics, anti-inflammatory drugs, pain-relief and antiviral treatments may help, alongside supportive care from the owner to tempt the appetite and provide grooming. It may be difficult to give oral medication if the mouth is sore, so some cats may require regular injections.

In some cases elimination of bacteria may only be achieved through tooth extraction and sometimes, full extraction of all the teeth is needed so there is no place for plaque to build up. Surprisingly, most cats cope well without any teeth and

full extraction will cure the problem in around 50 per cent of affected cats. The most difficult cases are often those where the back of the mouth is also affected. Unfortunately, some cases cannot be cured and long-term treatment may be required to manage the condition. Luckily most cats respond very well to treatment combined with dental management.

Diagnosis of oral health issues

Your vet will look for inflammation of the gums, ulceration, erosions of the teeth, plaque/tartar build-up and any signs of underlying disease. Your cat may need to have a general anaesthetic so work can be carried out. Further diagnostic procedures, such as examination with dental probes and x-rays may be required. Your vet will also try to identify any contributing factors involved. If necessary, blood samples and oral swabs for culturing viruses and bacteria may be taken, along with a biopsy of any inflamed tissues.

Treatment of oral health issues

The treatment required will be recommended by your vet depending on your cat's particular issues, but may include:

- surgical repair of any damaged hard or soft tissues of the mouth
- control of any contributing factors if possible
- removal of plaque/tartar above and below the gum line by de-scaling teeth
- polishing teeth to reduce plaque building up
- extraction of teeth when necessary
- supportive care to tempt appetite, grooming etc
- long-term oral medication, such as antibiotics and/or anti-inflammatory drugs

- home care, such as tooth brushing, dietary management and dental exercise

Some cats will tolerate brushing of the teeth and the use of specially-formulated mouth-washes better than others – it helps to start brushing their teeth when they are young.

Home care options are rarely sufficient without being carried out in conjunction with veterinary dental treatments, but can be useful to help control long-term oral health issues.

Cats Protection's dental policy

Cats Protection does not have infinite funds and must use its resources to help as many cats as possible through its rehoming and neutering initiatives and the provision of information.

This means that the charity does not undertake preventative dental treatments on cats in its care, nor can the charity afford to pay for all diagnostic procedures – eg dental x-rays or some viral tests. However, owners rehoming cats from the charity can obtain information on the cat's current known dental status.

If a vet indicates that a CP cat needs urgent dental extractions, scale and polish or other oral health treatments – for example due to resorptive lesions – the cat will have this performed prior to rehoming.

Learn more about your cat online!

Take a look at our free interactive tool to help you understand cats' origins and their behaviour within our homes. <http://learnonline.cats.org.uk/content/ufo>

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For more information about Cats Protection or to make a donation, please visit www.cats.org.uk or phone our Helpline on 03000 12 12 12.

Reg Charity 203644 (England and Wales) and SC037711 (Scotland)

FEB-15 CODE: 83214