



VOHC Policy on Trials Involving use of Toothbrushes or Similar Devices in Cats

A separate file describes the VOHC Brushing Technique for use in VOHC trials in [dogs](#).

Before considering setting up a VOHC trial involving a brush or similar device, be sure to read the VOHC [Protocol](#) information.

What Brush to Use in Cats:

Because the mouths of cats are too small for use of most standard-sized human toothbrushes, a brush marketed for use in cats can be used.

‘Finger-brushes’ (small brushes that are mounted on a cover placed over a finger) will not be accepted as the **control brush** in VOHC trials.

The trial sponsor is to select a small head, soft bristle brush; the selection will be reviewed by VOHC during the required pre-trial protocol review. To date, no specific brush has been demonstrated as meeting the VOHC standard when tested in cats without an active chemical agent. Once a particular brush has been shown to meet or exceed the VOHC standard in dental effectiveness, this will be adopted as a VOHC ‘control brush’ for cats; subsequently, novel brushes can be submitted for VOHC review if trial data show that they are statistically [at least as good as](#) the VOHC control brush in dental efficacy and provided that the trial demonstrates that the test brush does not injure oral soft tissues.

Brushing Strokes for Cats:

For VOHC trials, the following sequence is to be used, to ensure consistency between trials.

- Conditioning the cats pre-trial to accept brushing is strongly recommended.
- Recommended method for restraining cats while the teeth are brushed: Place the cat on your lap with the cat’s hind-quarters facing your abdomen and with your forearm acting as a gentle ‘side bar’. For a right-handed individual, the palm of the left hand is placed on the top of the cat’s head, with the middle finger and thumb placed on the side of the face to retract the commissures of the lips. This exposes the canine and premolar teeth on each side of the mouth. The little finger of the hand holding the brush can be placed below and between the mandibles to control movement of both jaws. The brush, held in the right hand, is laid against the teeth and stroked horizontally, initially using very light brushing pressure, progressively increasing the pressure until the bristles just start to curve.

- To assist in restraint, and to provide more consistency in the application of the brush, the cat's mouth is gently held closed.
- The brush is to be applied to the surface of the teeth at a 45° angle, with the tips of the bristles pointed towards the gingival tissue of the maxillary (upper) teeth. The head of the brush is to be wide enough so that the lower layers of bristles will brush the mandibular (lower) teeth during each horizontal brush stroke.
- The brush is pressed gently against the surface of the teeth during the brush stroke - if the bristles visibly deflect (curve), the pressure applied is too high.
- Three horizontal strokes, each consisting of a back and forth movement across the dental arcade, are made on each side. No attempt is made to brush the interior (palatal or lingual surfaces) of the teeth, because in cats, dental plaque and tartar accumulate most rapidly on the buccal (external) surfaces of the teeth.
- Each horizontal stroke is to include the maxillary (upper) canine and premolar teeth and the mandibular (lower) canine, premolar and molar teeth.

Assignment to Groups:

Cats will vary in their willingness to allow their teeth to be brushed. A pre-trial conditioning exercise (see above) is recommended to identify as many cats as possible as being 'willing' to have their teeth brushed. When the total number of cats potentially available for a brushing study is insufficient to permit only cats willing to have their teeth brushed to be randomly assigned to either brushing and control groups, cats in the 'willing' group can be assigned to the brushing group(s) and 'unwilling' cats can be assigned to the non-brushed group(s).

Palatability Agents:

Although doing so may increase the number of cats that are 'willing' to have their teeth brushed, palatability agents applied to the brush are not to be used in VOHC trials designed to test the effectiveness of a brush or similar device, because the palatability agent may predispose to accumulation of plaque. Exceptions to this requirement may be allowed if the product sponsor presents evidence satisfactory to VOHC that the flavoring agent will not affect the rate of plaque and tartar (calculus) accumulation.

Pre-trial Screening Examination for Cats in VOHC Trials

(This policy applies to all VOHC trials using cats)

Cats often have tooth resorption, sometimes in multiple teeth. When this is present and open to the oral environment, gingival inflammation and pain are common. Cats with tooth resorption at the gingival margin are not suitable for VOHC trials because they are likely to be more painful than cats without such lesions.

Cats are to be pre-screened during an awake oral examination consisting of visual inspection of the buccal surfaces of the teeth required to be scored in a VOHC trial (maxillary (upper) canine ,

third premolar and fourth premolar, and mandibular (lower) canine, third and fourth premolars and first molar. The teeth are not touched with an instrument during the inspection.

Any cats with the following findings are to be excluded from the pool for assignment to one of the VOHC trial groups:

1. Severely inflamed gingiva (bright red, rough surfaced, may be spontaneously bleeding) anywhere along the buccal gingival margin of scored teeth.
2. A focused lesion of inflamed gingiva of the sort often associated with an area of tooth resorption at the gingival margin of a particular tooth.
3. Evidence of loss of attachment, seen as exposure of part of the root.

Presence of plaque and tartar on the crown of the teeth is not of itself reason to exclude the cat, as this will be removed during the pre-trial professional dental cleaning procedure.