



Linguoverted Canine teeth are painful!

There is no doubt that the constant hitting of sharp teeth against the roof of your mouth is painful. Unfortunately dogs will pretend everything is OK when it isn't.

Linguoverted Canine Teeth

So, your dog has teeth in the wrong spot...

Linguoverted canine teeth (base narrow or inverted canines) is one of the most common orthodontic concerns we see in veterinary dental practice.

Linguoverted canine teeth creates a problem whereby the mandibular canines are displaced and strike the soft tissue of the maxilla, causing trauma and discomfort. If left untreated the damage to the tissue of the maxilla can be so severe that the canine teeth penetrate the hard palate creating a communication between the mouth and nose – an oronasal fistula. This is commonly due to skeletal problems, such as a Class 2 Malocclusion (overbite), a narrow mandible compared to the width of the maxilla or retained deciduous teeth.

When left untreated this condition will cause chronic oral discomfort and pain.

This condition can be addressed in a number of ways, with treatment being based on a number of factors including the patients age, the underlying cause and the position of the teeth.

Following is a general guideline of potential treatment options and when these may take place:

6-12 Weeks Old

At this age, and if the lower deciduous canines are traumatising the maxillary mucosa, we need to step in. Deciduous canine teeth are sharp and these puppies are experiencing pain every time they close their mouths.

We recommend extraction of the deciduous mandibular canine teeth at this age to alleviate this discomfort.

This must be done carefully as there is a risk that the developing permanent tooth can be damaged.

This is more often than not a palliative treatment. It is very likely that the permanent teeth will erupt in the same or a very similar position and further intervention will be required. In some cases, deciduous canine extractions relieve 'dental interlock' allowing the mandible to 'catch up' to the maxilla and the permanent teeth to erupt in a normal position.

5-6 Months Old

At this age the permanent canine teeth should be erupting.



Linguoverted Canine teeth can be moved.

Sometimes we can move
(Orthodontics) the offending
teeth into a comfortable,
atraumatic position.

Firstly, it is **ESSENTIAL** that the deciduous canines (maxillary and mandibular) are not retained. Deciduous teeth are retained when they are present, and the adult tooth is also present. This does not mean when the adult tooth is fully erupted. If the deciduous tooth is firm and the adult tooth is just erupting, the deciduous tooth needs removal ASAP. In this situation the permanent tooth is in the **WRONG** position, often in a much worse position exacerbating the malocclusion.

If deciduous mandibular canine teeth are retained the permanent tooth will erupt lingual or inside the deciduous tooth exacerbating the linguoversion. If the maxillary canine teeth are retained the permanent tooth erupts in front of the deciduous tooth narrowing the natural space between the maxillary third incisor and canine teeth blocking the ability of the mandibular canine teeth to erupt into a non-traumatic position.

Removal of the retained deciduous tooth will often allow the erupting tooth to move into the extraction site and a more appropriate position.

Eruption of the lower canines is a time where they are not “set” in the bone. These erupting teeth are susceptible to external forces that can guide them into different positions. Some animals respond well to oral ball play. With appropriately sized firm rubber toys/balls and frequent play behaviour, a suitable object can apply enough lateral pressure to move some lower canines into a more normal position. This should be undertaken for 15 minutes three times a day during the eruption period.

Some patients require a slightly more aggressive approach and are candidates for early orthodontic intervention including gingivoplasty procedure or placement of crown extensions. The gingivoplasty procedure changes the shape of the diastema (space) between upper third incisor and upper canine, creating a “ramp” that the erupting lower canine will follow, guiding it into the correct position. Crown extensions act to guide the teeth into a more appropriate position tipping the canine teeth into a more appropriate position. This is not always a procedure that can be done, but if suitable is usually the last treatment required.

Selective extractions of minor teeth may also be performed in some patients to create space for the permanent mandibular canines to erupt into.

8 Months Old

If there has been no success with previous interceptive interventions, or patients have not been suitable candidates, 7-8 months of age is the time where definitive treatment can take place.

We see many patients where orthodontic treatment is not practical or possible. For these patients a bilateral height reduction and vital pulpotomy may be appropriate. Our preference is to wait until 8 months of age where possible to perform this procedure.



Their mouth can be happy!

It is important to know that we can always make your dog comfortable. How we achieve that is slightly different for each patient, but regardless of how we get there improving comfort and quality of life is always our primary aim.

A height reduction and vital pulpotomy involves cutting the mandibular canines to approximately the height of the mandibular incisor teeth, physically stopping them from touching other tissue in the mouth. This exposes the pulp chamber of the tooth which must be protected with a series of restorations or fillings. This procedure requires periodic follow-up with dental radiographs over the patient's lifetime.

Other patients are candidates for an inclined plane. This is an orthodontic device that is made and attached to the dog's upper jaw, between the upper canines and incisors. This acrylic device is shaped so the lower canines strike it, and over time are guided into their correct, non-painful, positions. When first placed, the dog cannot close their mouth, but over a short time, usually 4 weeks, the teeth move labially. This is a "better" procedure than a bilateral height reduction, as there is minimal risk of damaging the teeth and long-term follow-up requirements are minimal.

Extraction of the lower canines is also an option for patients with linguoverted mandibular canine teeth and does not result in a terrible or painful result for the animal. Removal of these teeth offers relief from discomfort and is far better than doing nothing. Extraction of the mandibular canine teeth requires no long-term follow-up but may result in changes to the appearance of the patient. These changes are generally of a cosmetic nature and not medical concerns and include:

- Tongue protrusion from the mouth
- Thinning of the front of the lower jaw
- Regression in length of the lower jaw (generally only if incisor teeth also extracted)
- Small risk of jaw fracture during extraction

