

Recently we have seen a higher than usual number of patients present for evaluation of the lower canine teeth striking the hard palate or the gingiva. This represents a painful occlusion. Fortunately, more veterinarians understand that this malocclusion needs to be corrected, despite the fact that the patient is unable to communicate that it is painful. The reason for this occlusion varies. It was once believed that retained deciduous teeth lead to eruption of lingually displaced permanent mandibular canine teeth. It is now generally accepted that these permanent mandibular canines are genetically predisposed to erupt lingually. The deciduous canines should be extracted if there is a malocclusion to eliminate pain and a dental interlock, which can lead to a more complicated malocclusion. Similarly, the patient may have a narrow mandible, leading to a malocclusion. Consider the conversation you might have with the following client who presents with a 6 month old dog who presents with this occlusion (assume the left side appears normal):



What is the only option that should NEVER be offered?

### **Break to the website after this**

The option that should NEVER be offered is to do nothing! Viable treatment options include:

- 1) Incline plane to move the right mandibular canine tooth into proper occlusion over a 6-8 week period.
- 2) Crown Reduction/Vital Pulpotomy to perform endodontics and composite restoration to shorten the right mandibular canine tooth and eliminate contact with the hard palate.
- 3) Extraction of the right mandibular canine tooth (not a good option).

This owner opted for an incline plane:



This appliance is created with the patient anesthetized and is applied to both sides of the maxilla (even if the occlusion is normal on one side, to avoid a mandibular shift). When the patient closes its mouth, the mandibular canine tooth contacts the groove to gradually move the tooth into a normal and comfortable occlusion. Although this appliance must stay in place for several months and requires a compliant patient and owner, after the completion of treatment the patient has a “whole” tooth. It does require a second anesthetic procedure to remove the appliance.

A crown reduction vital pulpotomy would have worked to eliminate a painful occlusion and allow a hard palate erosion to heal. This option requires only one anesthesia but the patient ends up with a “cut” tooth that is bonded on the occlusal surface. Therefore, this option carries a higher risk of tooth infection than an incline plane. Extraction of the lower canine tooth is extremely invasive and carries a high risk of jaw fracture and complications associated with healing.