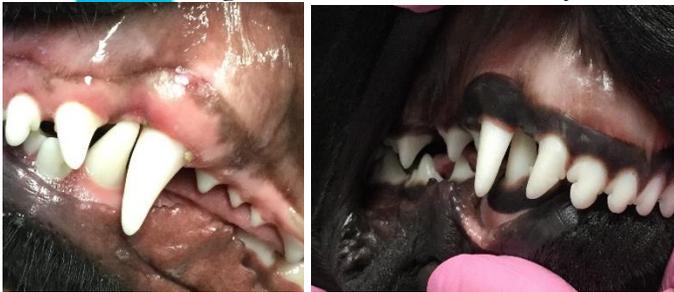


# Inclined Plane & Tooth Crown Extensions



## When are inclined plane or tooth crown extension orthodontic devices needed?

Some dogs and cats are born with an improper bite or jaw alignment called a malocclusion. Others have persistent baby teeth causing the adult teeth to erupt in an abnormal position. This can cause their teeth to improperly contact other teeth or tissues in their mouth. Left untreated, this will cause **pain** and **infection**. The goal of orthodontics is to move teeth while maintaining their function and vitality.



## What is an Inclined Plane?

An inclined plane is an orthodontic device made of acrylic +/- wire constructed in a patient's mouth while anesthetized. The device is adhered to the upper teeth. A slope is made in the acrylic, and the lower canine teeth slide along it when the mouth is closed. This directs them into a more comfortable position. The amount of force placed on the moving lower teeth is directed by the normal movement of closing the mouth.

## What are Tooth Crown Extensions?

Tooth crown extensions are similar to an inclined plane. They are made from acrylic, assembled within the mouth under anesthesia and movement is controlled by normal closing of the mouth. These are placed on the actual teeth we want to move.

The TCE is curved so that a little bit of pressure is applied to the extension every time the mouth is closed, gradually directing the tooth into an appropriate position. They are generally well tolerated and can be used both on deciduous (baby) teeth and permanent teeth.

## What are the risks involved with these orthodontic devices?

The greatest risk with both types of orthodontic devices is breakage of the acrylic or the tooth to which it's attached. This is usually the result of chewing inappropriate or hard toys. Gingivitis is a common side effect but resolves shortly after appliance removal. Teeth that move too quickly can suffer from a disrupted blood supply.

## How long does the process take?

The length of time needed for tooth movement is dependent on the age of the pet, amount of tooth eruption and how far the teeth need to be moved. Generally, the progression of movement is monitored with recheck appointments every one to 2 weeks. Often movement is accomplished in 4-8 weeks. Once movement is achieved, the appliance is removed under anesthesia, and the teeth are cleaned and polished.

## What home care will I be required to do?

Home care with brushing of the appliance and/or use of an oral hygiene rinse is needed to prevent debris and plaque from accumulating on the device. All firm chew toys and hard foods need to be avoided as they could cause the appliance to break. Avoid any tug-of-war or toy-catching games until the appliance is removed.

## Remember:

- Both orthodontic devices move teeth into a more appropriate position through passive force
  - Daily or twice daily brushing and cleaning is needed to keep the appliance clean
  - Orthodontics is an alternative to extraction which retains the tooth and its function