

EXPOSURE AND BONDING

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The impaction of maxillary and mandibular canines is a frequently encountered clinical problem that requires the treatment with an interdisciplinary approach. The 'master of ceremony' is the orthodontist who will be the one who determines if surgery is necessary to fit in with their orthodontic treatment plan. They will refer the patient to an Oral Surgeon to have the impacted tooth surgically exposed and potentially an orthodontic appliance bonded to the tooth. This is normally a gold chain. The orthodontist will then apply a traction force to the tooth to guide and align it into the dental arch. Sometimes the orthodontist may decide that it is better to remove the tooth completely.

How often does it occur?

Maxillary canines (top jaw) are the most commonly impacted teeth second only to the third molars (wisdom teeth). It occurs in approximately 2% of the population and twice as common in females. It is twice as common to occur in the maxilla than the mandible (lower jaw). 8% of patients have it occurring on both sides (Manne et al, 2012).

To determine the position of the tooth, radiographs will be taken along with the clinical examination. A 3D image may also be required. This will assist your surgeon for his surgical plan. Teeth may be placed labial (lip side) or palatal (roof of the mouth) of your dental arch.

Timing of the surgery

Typically the orthodontist applies braces and initial movement of teeth is carried out. The Oral Surgeon will then perform the surgery. The gold chain is temporarily secured to the braces and the patient will have to return to the orthodontist within a couple of days who will permanently attach the appliance. A post-operative review appointment will be booked with the Oral Surgeon and once satisfactory healing has occurred, the orthodontist will continue with their plan (time varies but approximately 12-24months).



The surgical procedure

Depending on where the tooth is positioned, the procedure may include making an incision in the gum and pushing it away for access, removing some bone overlying the tooth, and then bonding the appliance. The gum is then put back in place and the gold chain feeds through a small hole in the gum to be attached to the braces.

Treatment may need to be carried out under General Anaesthetic, but will depend on where it is positioned.

Risks of the surgery

The routine post-operative risks include pain, swelling, bleeding, and infection. The recovery takes 1-2 weeks. However, specific risks for this surgery include bone loss, root resorption, and gingival recession around the treated tooth and adjacent teeth. One risk (and an annoying one at that!) is that the appliance can de-bond, and require a second procedure to reapply it to the tooth. If this does occur, contact your surgeon or orthodontist immediately so that they can plan for the best course of action.

Hopefully the information in this leaflet will answer most of your questions about exposure and bonding. If you have any further questions, discuss this with your dental practitioner, Orthodontist or Oral Surgeon.