

## Consent for Placement of Orthodontic Temporary Anchorage Devices (TADs)

### What are Temporary Anchorage Devices (TADs)?

TADs are mini screws which are placed in strategic positions within the upper or lower jaw to assist orthodontic tooth movement. When a mini screw is indicated the clinician places a droplet of anaesthetic into the site of insertion. The orthodontic mini screw is usually placed uneventfully usually within minutes.

### When are TADs necessary?

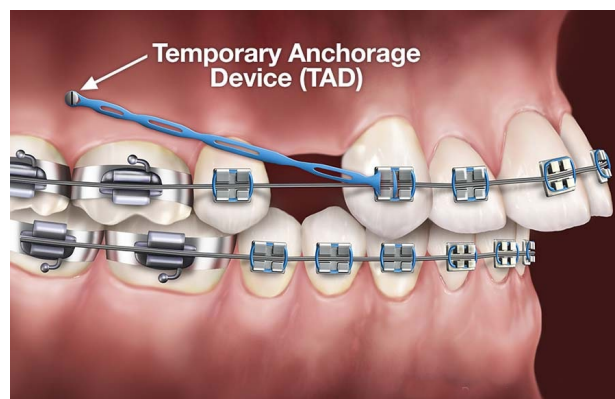
When moving teeth orthodontically, there is usually a requirement for one or more teeth to stay put (the anchor teeth), and one or more other teeth to move. The “anchor teeth” do not always ‘stay put’ and sometimes move, and this can be unhelpful in orthodontic treatment mechanics. The clinician sometimes decides to place a TAD, which is a mini screw to help control desirable tooth movements.

When moving one tooth against another, reciprocal forces that are at play in a fixed orthodontic brace system and this can result in undesirable movement of the tooth anchors. Placement of a TAD removes this negative influence. Rather than pulling teeth against each other, we can pull the teeth that we desire to move against the TAD (see photo below).

Some typical scenarios where TADs are used:

- When trying to pull protruded front teeth back teeth backwards (as the photo indicates)
- When trying to pull teeth together when there are large spaces to close
- When trying to pull severely displaced teeth into the correct position in the jaw

TADS are also known as mini-implants, or mini-screws, or bone anchored screws. They are approximately 1.5mm-2.0 in diameter and 6-9 mm in length. They are placed in the mouth under local anesthetic and significantly assist tooth movement in cases where this specific movement would not be possible. Once tooth movement is completed, the TAD is removed and disposed of. This will be discussed in full if this applies to you.



## How is surgery performed?

The clinician takes X rays to identify small gaps between various roots and analyses where a small diameter mini screw can be placed without damaging the root. There are optimum positions which are specific to each case where tooth movement will also be optimised. Your clinician will work out and advise the best position to place one or more TADs. When surgery is performed, this is completed with local anaesthesia. The TAD position is determined and the TAD usually self-threads. The TAD/s position may be placed around the teeth or the roof of the palate.

The surgery is usually completed in minutes. You will need to take routine pain killers for the day to minimise the effect of mild discomfort and pain. You should also rinse with 0.2% chlorhexidine for the week after surgery to minimise infection. The procedure is usually uncomplicated.

## What are the risks?

In theory, a root can be damaged by injudicious placement of a TAD. This is actually very rare. The placement of TADs are very tactile, and the clinician can readily determine that he/she is close to a root so as to change direction of the TAD. TADs are not designed to integrate firmly, and they can fail. A TAD will fail when excessive force is placed on them. They can also fail because of infection. This is more common in uncontrolled diabetics, and in individuals who do not maintain good oral hygiene.

Placement of the TAD/s may be required on more than one occasion during a course of treatment.

It is very important that you inform your clinician of any medical disorders, and provide a full drug history. If you are receiving any type of bisphosphonate drugs (Fosamax™, Actonel™, Boniva™, Aredia™, Zometa™), or have had radiotherapy to the jaws, then you are not a suitable candidate to receive a temporary anchorage device due to the risk of bone infection. Please do discuss your medical history in detail with your clinician and he/she will advise on the suitability of TADs.

I confirm that I have read and understood the information contained within this guide, and I have had the opportunity to ask questions. I feel that I understand the risks, benefits and limitations of the procedures described, and I understand that no promises or guarantees of the proposed outcome can be made. By signing this form, I am providing my explicit consent to render necessary treatment to assist my dental condition.

Name of Patient \_\_\_\_\_

Date of Birth \_\_\_\_\_

Patient signature \_\_\_\_\_ Dated \_\_\_\_\_

Parent/Guardian/  
Legal Representative \_\_\_\_\_ Dated \_\_\_\_\_