

# Unitek™ Temporary Anchorage Device (TAD) System

Planning and Placement Guide



Versatile  
Fixed



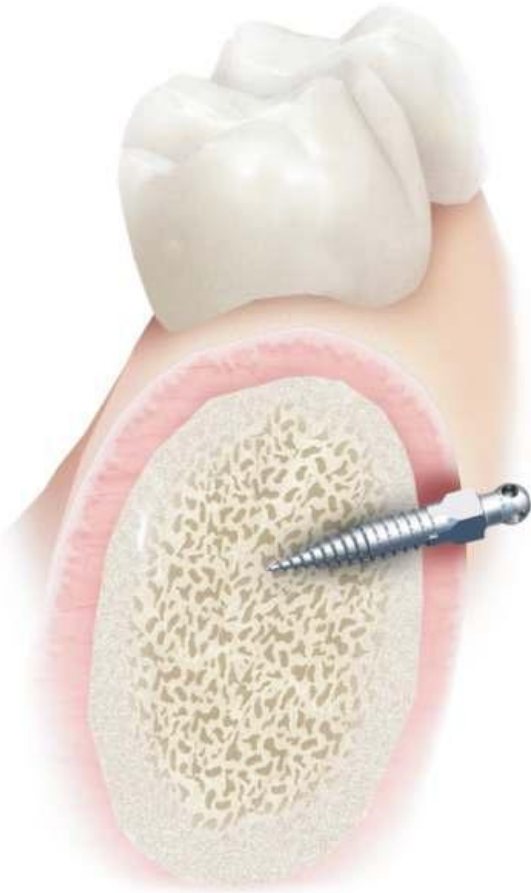
Anchorage  
for Treatment Efficiency

**3M** Unitek

# Treatment Planning

- Panoramic or P.A. X-ray - visualize root proximity
- Curved explorer tip - outline roots intraorally
- Bone sounding - measure tissue thickness using probe with endo stopper until bone is contacted
- Choose implant length based on tissue thickness
  - Up to 1.75 mm** soft tissue thickness: **6 mm** implant
  - Up to 2.75 mm** soft tissue thickness: **8 mm** implant
  - Greater than 2.75 mm** soft tissue thickness: **10 mm** implant

# Implant Length Selection



- Implant length is determined by bone and soft tissue thickness
- The complete 1.8 mm diameter of the implant should reside in the cortex
- Half of the square head lies within the soft tissue and half lies outside of the soft tissue
- The O-Ball head and grooved neck should be completely exposed

# Suggested Lengths for Mandibular Locations



- 8 or 10 mm
- 10 mm
- 10 mm



- 6 mm - anterior
- 8 mm - posterior
- 6 or 8 mm

*Implant lengths are a guide only, may vary from patient to patient*

# Suggested Lengths for Maxillary Locations



- 10 mm
- 8 mm-  
posterior



- 6 or 8 mm
- 6 mm-  
anterior



- 6 or 8 mm
- 8 mm
- 6 mm
- 10 mm

*Implant lengths are a guide only, may vary from patient to patient*

# 3 Simple Steps for Placement of the Unitek™ Temporary Anchorage Device (TAD) System

**Step 1:** Apply Topical Anesthetic

**Step 2:** Probe to Determine Soft Tissue Thickness

**Step 3:** Place Appropriate Length Implant with Instrumentation

## Step 1: Apply Topical Anesthetic\*

\* Topical anesthetic is indicated in most cases, except in patients with soft tissue that is thicker than about 2.5 – 3.0 mm, such as in the retromolar region or lateral palate. In these situations and in overly apprehensive patients, minimal infiltration of local anesthetic with a pneumatic needle-free syringe, such as the MadaJet, may be beneficial.

- **The procedure and material used by Dr. Jason B. Cope to apply topical anesthetic is included in his Cope Placement Protocol™.**
- *Dr. Cope prefers topical anesthetic so that the patient's tooth roots and PDL are not anesthetized. If there is pain, as opposed to pressure, this indicates the need to change the Temporary Anchorage Device (TAD) placement location or angulation.*

## Step 2: Probe to Determine Soft Tissue Thickness

- Perform bone sounding with periodontal probe to measure soft tissue thickness.

A marked periodontal probe with an endodontic stopper is probed through the soft tissue in the planned Unitek™ Temporary Anchorage Device (TAD) location until bone is contacted. At this point, the stopper rests on the soft tissue. The probe is then removed and the soft tissue thickness is recorded from the periodontal probe. Soft tissue thickness is the primary determinant of Unitek TAD length.



Photo provided by Dr. Jason B. Cope



## **OPTIONAL PROCEDURE: Pilot Hole with Spiral Drill or Pilot Notch with Round Bur**

It is rarely necessary to drill a pilot hole. In locations where the cortical bone is especially thick or dense such as the posterior mandible, it may be helpful to utilize a slow speed contra-angle handpiece to drill a pilot hole or pilot notch.

When creating a pilot hole, the Unitek™ TAD 1.1 mm Spiral Drill is used to perforate the cortex only. When creating a pilot notch, the Unitek™ TAD #2 Round Bur is used to create a notch about 0.5 to 1.0 mm in depth.

## Step 3: Place Implant with Appropriate Instrumentation

**Unitek™ TAD Contra Angle Driver** – typically used to place the Unitek™ TAD in the retromolar regions for implants placed vertically, in the anterior palate for implants placed vertically and in the posterior palate for implants placed laterally.

**Unitek™ TAD Straight Driver** – applicable in most facial locations in both arches.