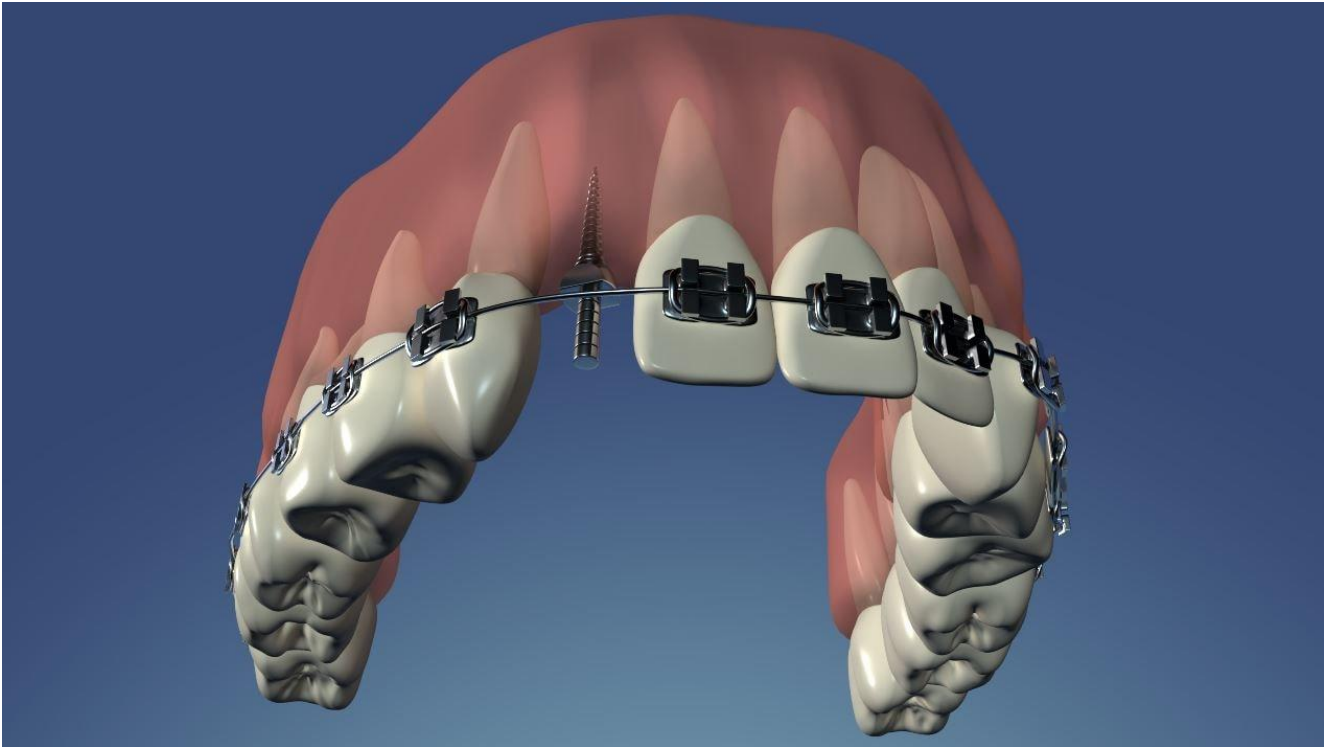


# Home



## TADplant – TAD Implant

A “placeholder” provisional dental implant designed for easy insertion and easy removal at will. The TADplant preserves crestal bone and implant sites until the adult patient can afford or younger patient has matured to have a standard dental implant placed. TADplants will not injure implant receptor sites.

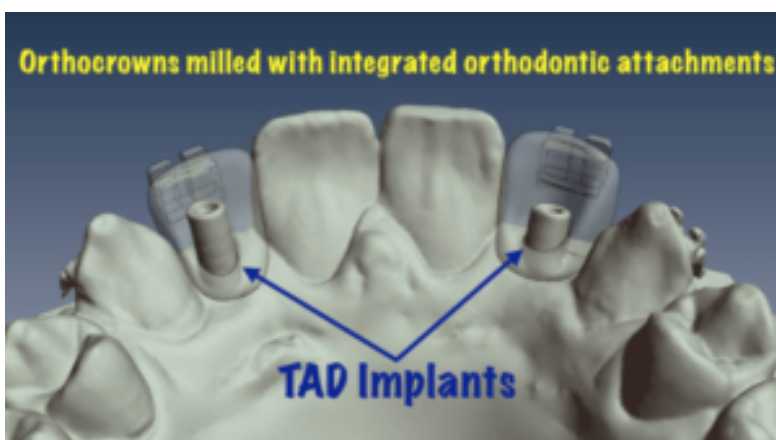
### **TADplant Surgical Workflow:**

A simple two step protocol using a surgical guide is demonstrated in the video below. TADplants were placed using 3D CBCT imaging to precisely plan a safe insertion path with an Anatomage surgical guide. A surgical guide was placed on the maxillary teeth and a starter drill was used to gently tap a small 1.2 mm hole (3mm deep) in the cortical plate. The TAD implant was then screwed into place in less than 30 seconds. Removal at a later date (4 or more years later) was accomplished in 19 seconds. At the time of removal permanent

fully integrated dental implants are placed with or without a surgical guide.

### **Scan, Plan and Print Orthoveneers**

No more bracket (braces) inventory! Orthoveneers come in 10 plus tooth shades. Brackets and veneers are 3D printed or milled out of the same (monolithic) PMMA (Plastic) material. After all orthodontic tooth movements are completed attachments (brackets/braces) are buffed off the monolithic veneer or crown surfaces. Then a clear fiberoptic-like wire is bonded to each tooth to retain the pre-implant surgery orthodontic correction.



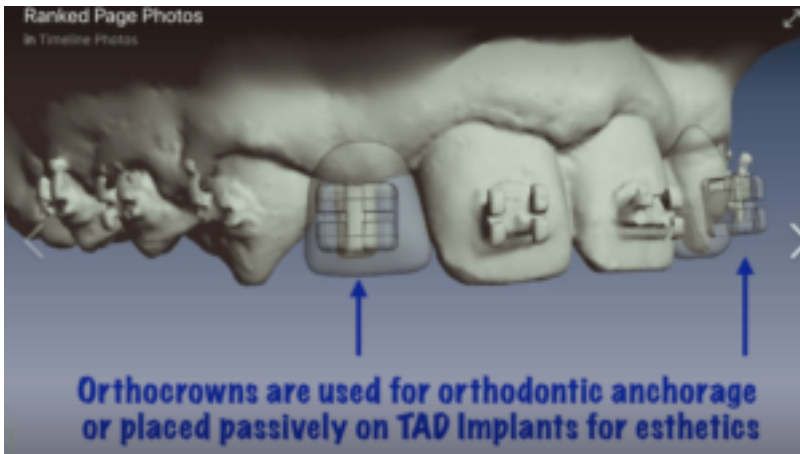
### **What is a Dental Implant?**

A dental implant (also known as an endosseous implant or fixture) is a surgical component that interfaces with the bone of the jaw or skull to support a dental prosthesis such as a crown, bridge, denture, facial prosthesis or to act as an orthodontic anchor.

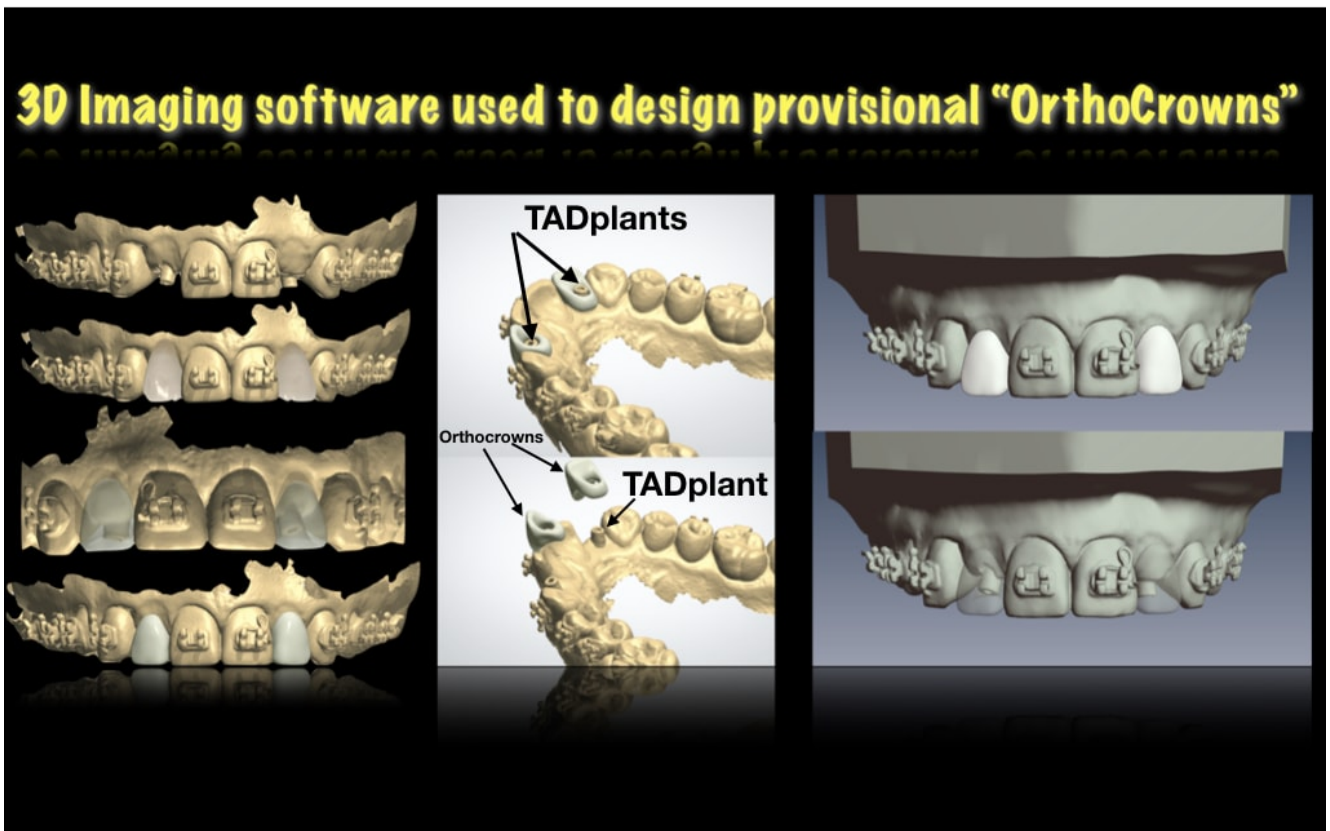
### [Reference](#)

### **Orthoveneers and Orthocrowns are the Future Workflow**

3D Dentistry is the future! Orthodontists and Implant Dentists can now use CAD designed 3D printed or milled orthodontic appliances.



3D Imaging Software was used to design Temporary Crowns and Orthocrowns. Orthocrowns have orthodontic attachments used to move teeth. The TADplant also has a Tibase abutment platform we call the TADbase that will accept permanent crowns such as PFMs, Cerec, Zirconia, Bruxir, E-Max as well as PMMA (Plastic) provisional crowns. Your Doctor will determine which one is best for your case.



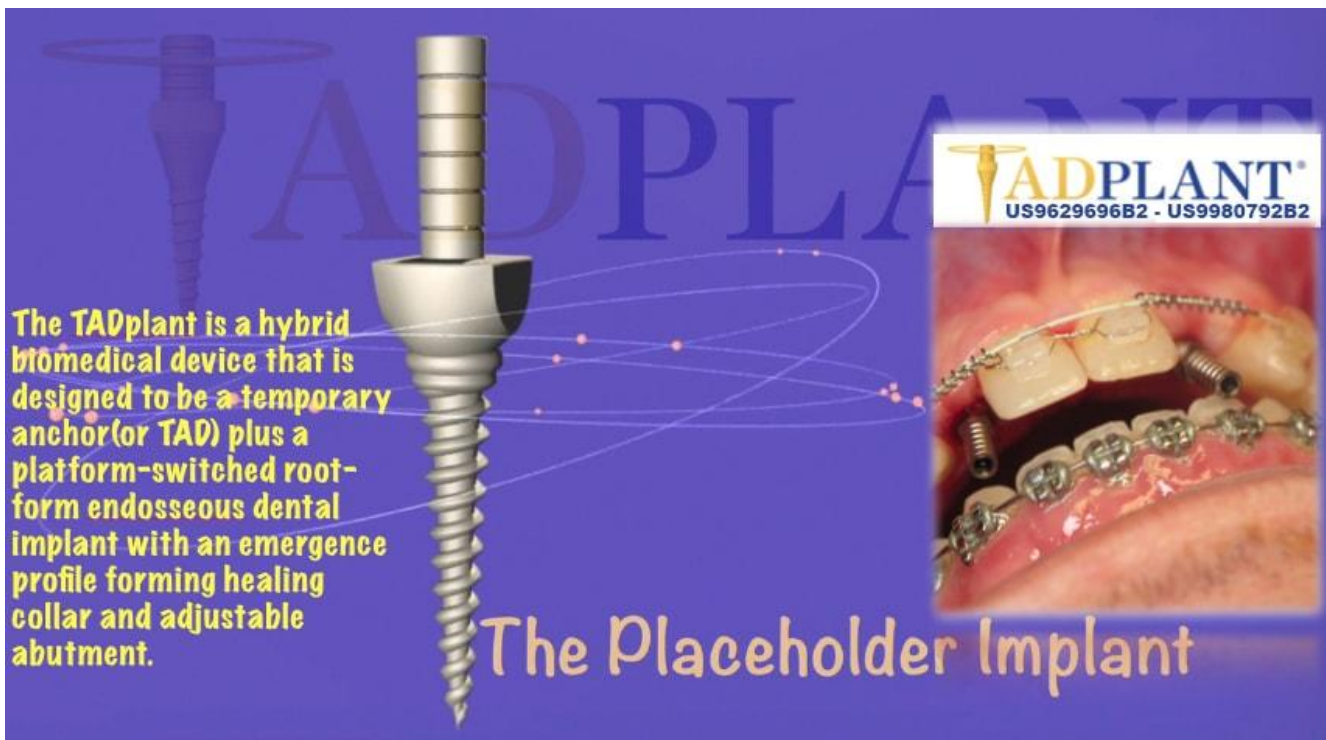


## Orthodontics and Implant Dentistry

Traditionally, patients complete orthodontics before implant surgery and are retained for several years before implant placement to allow for completion of alveolar development. In the majority of these cases, the patient unfortunately may have to undergo additional orthodontics prior to implant placement. The roots adjacent to the receptor site relax and converge apically. In addition the patient risks further

atrophy (bone loss) of the implant site(s) over the next 3 to 5 years. Patients may have to endure a ridge splitting procedure, block bone grafting and/or soft tissue grafting due to the frequent narrow labial – palatal dimensional changes. Early implant placement may prevent many of these complications and reduce the patient's overall costs. Waiting for implant placement may also make future implant placement impossible.

Younger patients missing teeth may benefit from earlier implant placement. This approach may be the lesser of two evils! Rather than risk further ridge atrophy, a provisional (mini) TAD implant could be placed during the final stages of adjunctive orthodontics. Non-integratable implants (smooth surface implants can be backed out down the road) if the patient experiences excessive alveolar development. The TADplant maintains the bone until a larger implant is placed.



## The Use of Temporary Placeholder Implants and Orthoveneers for Implant Site

## Preparation

Most Implant Dentists prefer pre-implant placement orthodontics to be 100% completed prior to placing dental implants. That was the past! Today orthodontists and implant dentists work together placing dental implants early during orthodontic treatment or sometimes before orthodontics is performed.

As teeth are being moved by the orthodontist or dentist, dental implants become firmer as they integrate in the patient's bone. One unique feature of the TADplant is its easy removal, if required, without injuring the implant receptor site. The TADplant was designed like a mini dental implant that is often used as a permanent dental implant. Dr. Jason Cope's 2014 miniscrew case report illustrated a young patient with mini dental implants supporting crestal bone for more than 8 years. I talked with Dr. Cope at a 2016 Orthodontic Conference and he said the patient in his article still had her miniscrew implants in place. He also reported in his [2014 journal article](#) an increase of crestal bone. Most implant dentists agree that placing dental implants preserves crestal bone. If a patient has a missing tooth he or she will have a substantial decrease in bone often requiring a bone graft before placing a dental implant.

## The "Placeholder Implant"

TADplants were developed by Dr. Ouellette using orthodontic principals, accepted dental implant concepts and especially, the consideration of continuing growth and aging changes in and around implant receptor sites. If a dental implant is placed too early the bone may remodel away from the implant exposing metal threads that can often be seen through the covering gum tissue. Also, a crown will eventually look too short as the maxilla (upper jaw) grows away from the dental implant. Fully super-integrated dental implants are often

difficult to remove without harm to the implant receptor site. Costly bone grafting may also be necessary. A case very successfully treated by a Periodontist colleague required several surgeries and new prosthetics (Crowning procedure). I asked my colleague what was the cost of all required procedures. He answered "over \$8000". It's my opinion, that my dental implant colleagues may consider thinking about dental implants in young immature patients as "temporary" not "permanent". The TADplant procedure was designed to help patients in all age groups avoid these complications. There are also expected and unforeseen risks with temporary dental implants. However, it should not cost \$8000 to replace them.

**Below see a current insurance estimate for the cost of one dental implant and crown today.**

## **Are we Placing "Super-Integrated" Permanent Endosseous Dental Implants too soon?**

Dr. Rolf Behrents, Editor of the American Journal of Orthodontics, published a landmark study in 1985 that documented growth and development changes continue to occur into the thirties , forties and beyond. "Permanent" super-integrated dental implants placed too early are subject to these changes. *Reference: [Growth in the Aging Craniofacial Skeleton](#), Center for Human Growth and Development, University of Michigan.*

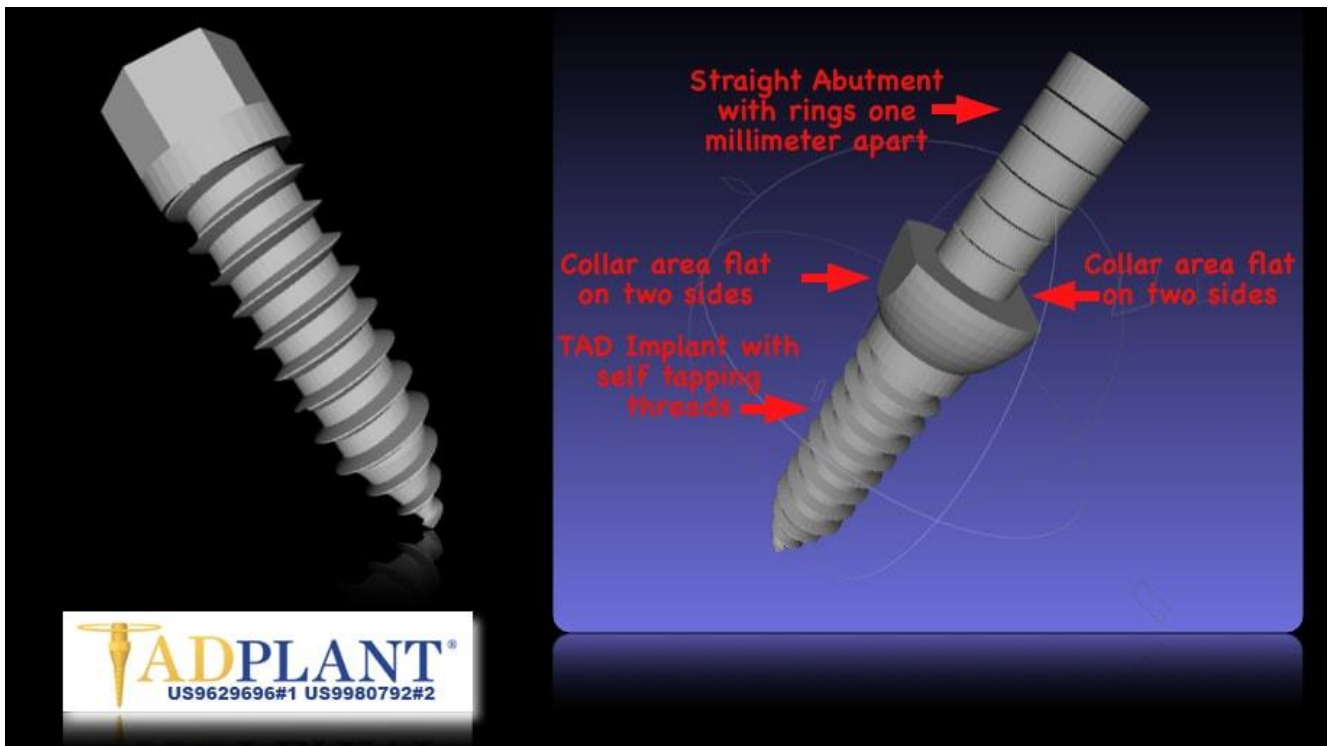
### **Additional References about mini dental implants and potential complications**

In 2003 Dr. G. William Keller, Periodontist, was one of the first dentists to use mini dental implants for patients congenitally missing maxillary lateral incisors. [Reference](#)

Effect of implant placement in growing adults on craniofacial

development: A literature review, D Anupama Prasad, D Krishna Prasad

Department of Prosthodontics Including Crown and Bridge and Implantology, A. B. Shetty Memorial Institute of Dental Sciences, Nitte University, Deralakatte, Mangalore, Karnataka, India [Reference](#)



**TADplant straight abutments with millimeter scaling rings eliminates dental implant paralleling posts when inserting multiple TADplants. Insertion is less complicated and faster.**

**NOT COVERED BY INSURANCE IS TYPICAL FOR IMPLANT DENTISTRY.**



Insurance Company's Pre-Estimate form shown below is for only ONE dental implant site. This estimate was the lower of two. The second estimate was just short of \$15,000. The insurance company will only cover \$355 for this patient. Most patients can not afford implant dentistry! Let's do something about this!



Delta Dental of Virginia  
 4818 Starkey Road  
 Roanoke, VA 24018-8542  
 (540) 989-8000 (800) 237-6060



0200972--S--B--D 020097

GROUP NO:  
 SUBSCRIBER:  
 ADDRESS:

**PREDETERMINED BENEFIT VOUCHER**

VOUCHER NUMBER: [REDACTED]

This voucher reflects authorized benefits based on the prestatement of costs submitted. Please review before commencing with treatment.

DATE OF ISSUE: 11/27/2018

Actual benefits will be subject to eligibility at the time services are rendered, plan limitations, processing policies, and coordination of benefits, if applicable, and may reduce or eliminate amount shown as estimated Delta Dental payments. Merits preauthorized are subject to change based on dentist's participating status at time of treatment and does not guarantee direct payment.

Predeterminations are valid for 90 days.

PATIENT: [REDACTED]

RELATIONSHIP: [REDACTED]

TOOTH NO OR LETTER	SURFACE	DATE SERVICE COMPLETED	PROCEDURE NUMBER	SUBMITTED AMOUNT	APPROVED AMOUNT	CONTRACT ALLOWANCE AMOUNT	% CO-PAY	ESTIMATED PATIENT PAYMENT	ESTIMATED DELTA DENTAL PAYMENT	PROCESSING POLICY 1	PROCESSING POLICY 2	PROCESSING POLICY 3
***** SERVICES APPROVED *****												
			D7880	775.00	775.00	710.00	50.00	420.00	355.00			
***** SERVICES DENIED *****												
24			D6060	1,800.00	1,800.00	0.00	50.00	1,800.00	0.00	7		
24			D6056	795.00	795.00	0.00	50.00	795.00	0.00	7		
24			D2799	350.00	350.00	0.00	50.00	350.00	0.00	38		
25			D2799	350.00	350.00	0.00	50.00	350.00	0.00	38		
			D7950	2,900.00	2,900.00	0.00	0.00	2,900.00	0.00	11		
			D7921	500.00	500.00	0.00	0.00	500.00	0.00	276		
			D7921	500.00	500.00	0.00	0.00	500.00	0.00	276		
24			D6010	2,250.00	2,250.00	0.00	50.00	2,250.00	0.00	7		

PROCESSING POLICY EXPLANATION(S):

11: Per this plan, this procedure is not a covered benefit. Please advise patient of responsibility for fee. Refer to the exclusion section of your dental plan document for more information.  
 276: According to the plan, this procedure is not a benefit. The specific procedure/CDT code used relates either to cosmetic and/or investigational services. Please advise patient of responsibility for fee. Refer to the exclusion section of your dental plan document for more information.  
 38: This procedure is a component of the completed procedure and may not be billed separately. Participating dentists have agreed to charge the patient only the amount indicated as Patient Pays. Refer to the exclusion section of your dental plan document for more information.  
 7: Patient not eligible for service due to limitations specified in this plan. Please advise patient of responsibility for fee. Refer to the limitations section of your dental plan document for more information.

9,865.00      355.00

TOTAL ESTIMATED PATIENT PAYMENT      TOTAL ESTIMATED DELTA DENTAL PAYMENT

**\$9865 pretreatment estimate for one dental implant and crown!**

Upon completion of treatment, please return this to Delta Dental of Virginia for payment.

- IMPORTANT: Before returning this, please be sure that:
1. Date of service has been inserted for the treatment completed.
  2. Service not performed is deleted by drawing a line through it.
  3. Minor changes to the treatment plan have been indicated clearly.
  4. Major changes to the treatment plan have been resubmitted on a separate claim form as a prestatement of costs.

Dentist's Signature \_\_\_\_\_ Date \_\_\_\_\_  
 DENTIST LIC NO. GA00000000 [REDACTED]

CONTRACT DEDUCTIBLE APPLIED 0.00  
 CONTRACT MAXIMUM EXCEEDED 0.00

**We are Ready to Emerge into the Market**  
 Clinical trials have ended and we are seeking implant

dentists, investors and companies that will help us bring the TADplant to market.

[Learn More](#)