# Who Places Miniscrews? An Informal JCO Survey

ast year, a JCO Readers' Corner found that only 25% of a small sample of respondents were currently using miniscrews in their practices, and many fewer were placing the screws themselves.<sup>1</sup> By now, however, the sheer abundance of published articles on temporary anchorage devices (TADs) and the ubiquity of miniscrew advertising and hands-on courses might lead us to think that virtually every clinician is using them. In the 2008 JCO Diagnosis and Treatment Study, to be published beginning with our November issue, a much broader sampling will give us a more statistically valid idea of how quickly this technique has grown since the 2002 Treatment Study, which did not include any questions about skeletal anchorage.

In the meantime, JCO recently conducted an informal e-mail survey of its editors, authors, and colleagues to ask whether they are placing their own miniscrews, and to find out what they know about current TAD procedures around the world. The responses were so interesting and varied that we sent out a second batch of queries to a larger group.

With some exceptions, the difference between whether an orthodontist places miniscrews or refers them out seems to depend primarily on two variables: age and practice setting. Based on replies from about 50 respondents to our informal survey, it appears that the clinicians most likely to insert their own miniscrews are relatively young or have some connection to a university orthodontic program.

We'd like to thank the orthodontists who gave us their reasons for placing or not placing miniscrews. Most of their replies are printed below, and many are also posted in our Online Forum at www.jco-online.com, where we hope to continue the dialogue.

> WENDY L. OSTERMAN Assistant Editor

Maybe it is a generation issue, but I have observed that orthodontists who have been out of school for approximately 15 years or more generally prefer to have an oral surgeon place their TADs. More recent graduates, less than five years, are generally placing their own. Very new grads and residents are placing *all* their own TADs. Many programs have integrated TAD placement into their curriculum, and the residents are still accustomed to providing anesthetic and performing dental procedures. With this training and confidence, they feel it is a "no-brainer" for them to place the TADs.

Our JCO article in March 2005 covered the issue of having an oral surgeon place the TADs.<sup>2</sup> Our consensus group for that article felt strongly that the orthodontist, with a knowledge of biomechanics *and* proposed directions of tooth movement, was in the best position to place TADs. This information may be somewhat complicated to explain on a written instruction form to the oral surgeon. Nevertheless, a variety of options should exist for the diversity of orthodontists out there.

JAMES MAH, DDS, MS, DMS Los Angeles, CA

I am not placing TADs. I have had some issues introducing laser tissue removal into my practice with some reservations from the patients and parents about "cutting" tissue. Screwing a screw into the bone requires a better sales job than I am ready to do.

I have taken about five courses on TADs, but I am not ready to do them yet. This is my problem, i.e., not a treatment problem. It takes some education in the office for the parents and patients to understand about this issue—and it takes some experience for the doctor putting them in. Since I have the ortho clinic at the dental school available, I will put some in there to build my confidence before I do them in the office but it *will* become a routine part of treatment in the future because orthodontics needs a better anchorage system than we have now.

In my understanding, the problem with referring them out is that the oral surgeon may place a TAD that doesn't have the correct head for connecting wires or springs to it. Plus the patient has to pay for the procedure. Also, TADs can come loose, which means that the patient has to go back to the oral surgeon to replace it—at an additional charge in most cases. This causes some trepidation on the part of the parents and patients about the wisdom of doing this "experimental" procedure and puts the orthodontist in a real bind about his recommendation to do this.

I think some bad experiences of these types will force the orthodontist to become the controlling person in this process.

#### W. RANDOL WOMACK, DDS Phoenix, AZ

I place them and have now for about four or five years. The dentists nearby now recognize the ability to avoid certain surgical plans, and even the oral surgeons now occasionally refer patients who have been denied insurance coverage for surgery. We used to set aside a specific appointment, but it takes so little time it now is simply included in an adjustment appointment.

I have done demonstrations/instructions in the offices of two colleagues to increase their comfort level; we had many of the orthodontists in the area attend. I would really recommend that orthodontists learn how to place them in their own offices. Do not rely on the oral surgeon or periodontist to place them, because if the intended site doesn't work they may end up placing them in a site that doesn't work well orthodontically. I have attended courses by Jason Cope and John Graham, and they are both excellent, for those who may be interested.

I have about six Invisalign patients I used them with, intruding molars, distalizing segments with asymmetrical arches, extruding canines just be creative, build the movement into the ClinCheck, and let the TAD provide the means to get there.

DAVE PAQUETTE, DDS, MS, MSD Charlotte, NC

We have taught it as a basic clinical skill for our residents in our ortho program for about four years, but my impression is that less than 10% of private-practice doctors actually do it. Everybody agrees that it is critically useful in many cases. But on a day-to-day basis, this may still be a bit of an academic area, because in private practice a lot of doctors just do not want to place them. Then there is a cost issue when referring them out, as some oral surgeons and periodontists charge what seems like a lot to place them (around \$400-600 per micro-implant). If they are presented as an add-on to treatment, patients may well decline. We believe it is better to just tell patients who we think need them that they are a part of the treatment and not an option (thus contained in the initial cost when placed by the orthodontist).

We really need a survey on this, as we are all just really guessing. My being in an academic area in fact may be overestimating the actual use by private practitioners.

ROBERT L. BOYD, DDS, MED San Francisco, CA

After a number of bad placements by good surgeons, I have placed my own miniscrews for two years now. They are as quick and as easy as rebonding a loose bracket. Now they are in the right position!

We use them when the case calls for some sort of skeletal anchorage (use your imagination). The referring doctors are impressed with the results. Not too many doctors in my area are doing them.

RANDALL MOLES, DDS Milwaukee, WI

Here is a paragraph from the book chapter that I had published in the latest Moyers Symposium book<sup>3</sup>:

"Who should place miniscrews? Ninety-five percent of miniscrew acolytes currently prefer to refer,<sup>1</sup> but NFL (Not For Long). Like many recent converts,<sup>4</sup> they will likely find that convenience, control, and cost are compelling factors to DIY (Do It Yourself). If, however, the decision is made to refer the patient to a periodontist or oral surgeon for placement of the TAD, then a narrative description of the exact position of the implant is critical. These instructions should include details of the position of the miniscrew relative to the mucogingival junction and marginal gingiva, the insertion angle relative to the alveolar bone, and the orientation of the hole, slot, or bracket that may be featured in the head design of the screw. In addition, do you want the screw driven until the transmucosal collar touches bone or is partially embedded in the tissue, and do you want the head of the screw compressing, just touching, or slightly above the tissues"?

I had 300 screws placed by others before doing the next 365 screws myself. We can do this and should do this ourselves.

S. JAY BOWMAN, DMD, MSD Portage, MI

I had been reading about TADs in the journals for a few years and was excited to start using them as soon as they became available in the U.S. I have been placing my own TADs for almost three years now. I think it's a huge waste of money and the patient's time to have an oral surgeon or periodontist place the implants. After all, we are the ones who know exactly where we want the TADs and the desired direction of force needed. I add the TADs right along with a normal appointment. From what I hear, the orthodontists who are using TADs regularly are putting them in themselves.

#### ROBERT S. HAEGER, DDS, MS Kent, WA

I am very glad that you have published these comments, since recent clinical episodes with my own private patients and oral surgeons have somewhat changed my opinion (as can occur when the learning curve is being leveled). While faculty and residents within our department are placing TADs in *very selective* cases, I would add that there are numerous instances in which these devices should be placed by experienced surgeons, since the need for patient sedation during the procedure, as well as complex placement situations, too often occur. In short, *case selection* is the most important parameter, in my opinion, and there are too few reports of negative sequelae involving TAD placement to strengthen this experienced-based opinion. Is it that these occurrences are not being reported, or is it simply the leveling process of a new procedure merely taking time to be assimilated into private practices? I would suggest that it is a mixture of these two possibilities.

JOHN STOCKSTILL, DDS, MS Augusta, GA

My associate and I have given some seminars on the use of TADs for RMO. We, of course, place our own, but there does appear to be a reluctance by orthodontists to place these. In addition to orthodontists, pediatric dentists, oral surgeons, and periodontists have also taken our seminars, primarily for the purpose of placing them for the orthodontists with whom they work.

Placing TADs is more of a paradigm shift than Invisalign for most orthodontists. This is strictly my opinion, though a survey could confirm this, but I believe the younger orthodontist who is fewer years removed from practicing dentistry or from dental school will be more likely to place his or her own TADs. What's more, the orthodontist who placed them in his or her residency program will more likely be placing them. Orthodontists with more years in practice will be less likely to try something requiring new skills, as I have found while giving Invisalign seminars.

In surveying members of my study club, I had seven out of 16 responses, with six replying that they place their own. I feel like those that do place their own would respond, so it may very well be six out of 16. Not scientific, but representative of our group.

MARK PERELMUTER, DMD, MS Louisville, KY

We use them, and I place them. It has made a tremendous difference in retracting teeth, torquing incisors, and intruding posterior teeth to close a bite. The use of TADs has generated a host of new questions:

• What are the limits? Suddenly we can move

teeth in ways that were either impossible or unusual (as with a patient wearing headgear 16 hours a day). How far have we expanded the "envelope" of movement? What *can't* TADs do? What *can* they do?

• What are the most effective mechanics to accomplish our goals? With TADs, possibilities open up for planning treatment differently than we have previously, because there are possibilities we didn't have. We can get creative about how to move teeth, and it will be fascinating to share our various ideas and develop the new protocols for effective movement.

• What shouldn't we do? Since we now can move teeth in ways we weren't able to before, a proper diagnosis is even more important. For example, we can now use TADs to retract and torque the upper incisors in a patient with a severely retrognathic mandible, and while we may achieve a functional occlusion and pleasing alignment, we finish with a dished-in facial profile. The patient is happy, but did we really do him or her a service? Is the patient going to develop sleep apnea in the future? Just because I can do it doesn't mean I should do it.

Bottom line: TADs have changed the way we do orthodontics in a very fundamental way. It is important that these issues be discussed in open forums where the participants are looking for solutions, not promoting their personal agendas. The possibilities are wonderful.

At present, I believe I am the only one in southwest Michigan using or placing them. The oral surgeons didn't want to place TADs, and to my knowledge have not. I find I have to go nationally to find colleagues to discuss this with. LOUIS G. CHMURA, DDS, MS Marshall, MI

I haven't placed TADs myself, but wish to. I'm presently taking the necessary courses. Surgeons now place mine. *We should*.

WILLIAM MEHAN, DMD, MS Manchester, NH

In the San Diego area, the oral surgeons and periodontists are placing the TADs. New graduates of orthodontic programs have placed them in school. I do know of a few orthodontists who are starting to place them.

DIANE MILBERG, DDS, MSD San Diego, CA

We have made arrangements with an oral surgeon to place our TADs for the same cost he would charge to remove a tooth. I mark on the patient photos where to place the TADs, and he places them and then charges the patient for the cost of the TAD and the equivalent cost of an extraction. This process has worked well for us, the patients, and the oral surgeon.

I will try to relate what I have heard about TADs as I travel around the country doing my lectures and speaking with orthodontists. More and more TADs are being used by orthodontists. Many of the TADs are being placed by younger orthodontists, while some are being placed by older orthodontists, but many of these doctors are referring the procedure of placing the TADs out to oral surgeons or periodontists. Many doctors don't want to give injections. I feel in the future more and more orthodontists will be placing TADs themselves, but it will be an evolution.

JERRY CLARK, DDS Greensboro, NC

The orthodontists I know place TADs themselves and do not refer patients out. My feeling is the younger age group likes to do it themselves. Referrals are primarily by orthodontists who have been in practice 15 years or more.

RAVINDRA NANDA, DDS, PHD Farmington, CT

In the past three months, I have lectured in St. Petersburg, Paris, London, Munich, Madrid, Montreal, Singapore, Auckland, Melbourne, and Sydney, not to mention traveling all over the U.S. (nearly every major city in the last 12 months), lecturing to thousands of orthodontists about miniscrews. My observations are in stark contrast to those of the most recent JCO readers' survey. The majority of orthodontists in the U.S. will be placing their *own* miniscrews in their offices within the next three years. They will have to of necessity, because it is becoming the standard of care, much as Dr. Keim observed in a recent editorial.<sup>5</sup>

Orthodontists in the U.S. and around the world are not afraid to place miniscrews; they merely need to be taught the techniques involved. When I begin a lecture to a group of orthodontists, I always ask how many are actually placing the miniscrews themselves. It is usually around 15-20%. I then follow up at the end of the lectures by asking the same question, and almost without exception the number who plan to place their own miniscrews is 100%.

Orthodontists see the distinct disadvantages to having other specialists place miniscrews. This evolution is moving at light speed, and miniscrew placement is being adopted by orthodontists in the U.S. and around the world faster than any new technique in recent memory. I'm out here in the trenches, and I see it every day.

JOHN W. GRAHAM, DDS, MD Litchfield Park, AZ

I took the Vector course from John Graham and have been placing my own TADs for a few months. I had an orthodontist visit me today, and he was somewhat surprised to see me doing them. The technology of doing them is quite simple, and it will undoubtedly catch on and continue to become part of the skills of more and more orthodontists.

> JAMES ECKHART, DDS Manhattan Beach, CA

I have never placed my own, *but* an oral surgeon places them all for me, and at a very reasonable price. In exchange, he gets many more referrals on these and for extraction of third molars, bonding of impacted cuspids, etc. The orthodontists need to demand a break on cost from an oral surgeon for this valuable service.

I know of no orthodontists who are placing their own—that would be four orthodontists in this area.

> JOHN DE VINCENZO, DDS, MS Arroyo Grande, CA

I place all of mine and have for some time. I feel I am better qualified to know where I want them than anyone else.

> JOE MAYES, DDS, MSD Lubbock, TX

TADs are very uncommon in our area. I know of no orthodontists in our area placing TADs.

## DAN RINCHUSE, DMD, MS, MDS, PHD Pittsburgh, PA

We use TADs extensively in our office, but we do not place them ourselves. We send them to the oral surgeon. For us, it is a financial issue. We don't want to charge our patients any more than we currently do, and we believe that patients view it differently if the fee for the TADs is being paid to someone else. If we lived in a different socioeconomic area, I would probably place them myself. We send a recent pano and a plaster model with marks indicating ideal placement. If the surgeons are unable to place them where indicated, they must call our office before placement. Also, we indicate to the surgeon what our treatment plan is and exactly how we will be using the TADs.

NATALIE PARISI, DDS Wyomissing, PA

As of this time, there seems to be a split between self-placement and those placed by oral surgeons or periodontists. It seems that younger, less established orthodontists are placing their own TADs because it is less expensive than referring, and they tend to be more comfortable doing so. I have no numbers to verify this.

> ROBERT BINDER, DMD Verona, NJ

More and more of my colleagues are placing their own TADs, especially new graduates who have been taught the technique in school. To date, I have not taken a course or workshop on TAD placement and have not purchased the equipment kit. Currently, I am having an oral surgeon place the TADs for me, after reviewing the patient's diagnostic records to determine the optimal location. It appears that more and more orthodontists will place their own TADs in the future.

## GAYLE GLENN, DDS, MSD Dallas, TX

The grapevine of the orthodontists in the San Fernando Valley of Southern California tells

me that they prefer oral surgeons or periodontists to place the TADs. The reasoning is that the oral surgeon or periodontist has the knowledge of the oral anatomy to best insert and position the TADs, and the oral surgeon or periodontist is skilled to resolve any TAD morbidity problems during and after orthodontic treatment. In addition, local anesthetics are being used more to minimize discomfort during the TAD placement. An informed consent for anesthetics would be indicated. Many of the orthodontic practices have a needle-free environment. The placement of the TADs would also be best done in a private treatment room.

## LEE LOGAN, DDS, MS Northridge, CA

Yes, I do all my own TADs, and quite a few of them; I've heard nothing from my local colleagues about using them. I find them a valuable source of anchorage to enhance mechanotherapy. Like all treatment modalities, they require a degree of discretion and skill in their placement, but if done within the parameters of prescribed use, I've found them to be rather trouble-free!

ROBERT D. HELMHOLDT, DDS Fort Lauderdale, FL

I do not do TADs right now, as I haven't figured out how to put them in the financials of the treatment plan. I have not heard of local guys who are placing their own screws. In this area, oral surgeons and periodontists mostly do the placement of TADs.

## SARAH SHOAF, DDS, MED, MS Winston-Salem, NC

We are using TADs in our practice on a limited basis, and we are placing them ourselves. We are not looking for an excuse to use them, but use them only when nothing else will work. They are great in mutilated dentitions to help close spaces. There are two other practices in a neighboring town that use them. Like anything else, the progressive practices are more into the TADs than the others. We are using the Ormco Vector brand, which seems to work very well. They have developed a well-thought-out system.

RICHARD RÉSLER, SR., DMD Saginaw, MI Most people in my area do not want TADs placed in order to aid tooth movement, but only if the movement cannot be accomplished any other way. I have offered TADs as an alternative to headgear, but so far no takers. Is it the extra cost or the procedure itself? I do not know, but poor cooperators often have poor oral hygiene, which can lead to problems. I have not offered TADs as an alternative to orthognathic surgery, because I do not have faith that they will successfully replace surgery in my practice. I know that among the few orthodontists I speak to, only one places his own.

As far as prescribing placement, I could use a combination of models and x-rays, but what we do is line up a few cases, and the oral surgeon places them while I am present. We do this in my office or his, and then the TADs are loaded immediately. A little inefficient, but I would rather he did them than me, and we have been friends for a long time.

## DAVID WARREN, DDS Miami, FL

It appears that more and more clinicians are using miniscrews. The initial cautious approach, as was obvious in the Readers' Corner survey, is waning and, I believe, will continue to do so. More clinicians are tending to place the devices themselves, but still, if they had their druthers, they would prefer placement by the periodontist. They are very conscious of the additional expense and time constraints to the patient. That factor, plus the obvious biomechanical advantages of these devices and acceptance of this technology by their colleagues, is pointing the way toward more hands-on involvement. I believe that, in due course, most clinicians will be using them to achieve specific biomechanical goals.

JOHN J. SHERIDAN, DDS, MSD

Jacksonville, FL

We place our own screws, but I believe most in our area do not.

DAVID SARVER, DMD, MS Birmingham, AL

We do use some miniscrews for skeletal anchorage, and they are placed by our oral surgeon and not by us. Many of our colleagues are also using miniscrews. In general, I believe that these devices are being overused when conventional anchorage methods would suffice. This has happened in other countries (Korea and Japan), and we now see it happening in the U.S. Hopefully, this trend will improve as we learn more about their effectiveness and how to use them properly.

RICHARD P. McLAUGHLIN, DDS San Diego, CA

I have placed about 1,000 TADs in my private practice and in two residency programs. I have lectured nationally and internationally on the topic of the placement and use of TADs and have taught several cadaver courses on the placement of these devices and possible indications for their use.

There is no question that the patient is best served by having the orthodontist place the TADs due to the following reasons:

- Cost.
- Immediate loading of TADs.
- Location/positioning.
- Placement protocol.

• Many oral surgeons, periodontists, and GPs do not have the training in the mechanics being used with these devices.

In my opinion, the use of skeletal anchorage is the standard of care. The only question that exists now is: How many orthodontic providers are willing to seek proper education and training in order to deliver this service to our patients? It is my recommendation that before placing TADs, one should seek the proper education and training to do so. I have noticed in talking and working with doctors all over the world that their confidence and competence are directly proportional to their education and experience.

> JACK FISHER, DMD Memphis, TN

I have had TADs placed in two patients so far, by oral surgeons. Another patient is being aligned prior to placement by a periodontist. I have considered a cadaver course for placement training, but so far I have not done that.

WILLIAM MONTGOMERY, DMD, MS Portland, ME I have had a far more difficult time convincing parents of the need for TADs than for other procedures such as laser exposures. One of the reasons may be the additional fee and effort to go to another office if the procedure is not done in-house. In addition, the idea of placing a TAD in a child's mouth is not appealing to many parents. A good deal of time needs to be taken to fully explain the benefits of this procedure to the parents.

## DAVID JENKINS, DMD, MSD Old Tappan, NJ

I place all TADs mesial to the second molar. I do not place retromolar or zygomatic TADs. I have colleagues who place TADs and an equal number who refer out. I believe in general, TAD placement is equally divided among orthodontists, periodontists, and oral surgeons. With this said, I believe only 5% of orthodontists are placing TADs; maybe 10% are using them or thinking of using them. It will be interesting to see what happens in the next five years, when orthodontic residents trained in TAD placement enter the workforce. Will TADs become mainstream, or will the excitement of skeletal anchorage fade, similar to distraction osteogenesis?

> NEAL KRAVITZ, DMD, MS South Riding, VA

I have used TADs for about 12 years with surprising results. We started inserting them about four years ago to help patients afford the benefit of using them. We average inserting about four to five a week.

Reducing gummy smiles, Class III corrections, retracting ectopic cuspids, closing space with congenitally missing bicuspids (without affecting the face), and correcting mandibular asymmetries have been my largest surprises. The applications are still growing as we keep our minds open.

Our use of SureSmile, adult orthopedics, TADs, and lasers has really changed our life. We are having fun finishing cases all day long in less than a year, with results that used to require major surgery.

> ROBERT CHASTANT, DDS New Iberia, LA

We do not use TADs at present in our practice, although we are looking at going in this direction next year. There are four groups of oral surgeons in close proximity to our practice, and we may consider referring our patients for the surgical placement of the TADs.

JEFFREY BERGER, BDS, DO Windsor, Ontario

Here's my experience:

*No* to placing them myself: I prefer to stay away from anesthetic, blood, invasive procedures, etc. *No* to having an oral surgeon place them. They seem to think of them as "implants" and charge accordingly (too much!).

*Yes* to a GP down the way who places them all for me. I'll send him a model or a photo and show him exactly where I want it placed, and he does so accurately, efficiently, and inexpensively.

BRUCE McFARLANE, DMD, BSCD, MCLD Winnipeg, Manitoba

In Mexico, there are very few orthodontists who are using them, but the number has been increasing lately. The orthodontists with years of practice usually send the patients to the maxillofacial surgeon. The ones who use them quite a bit are graduate students of the various orthodontic programs, and when they are on their own, they place the mini-implants in their office. This saves the patient time and expense, and the orthodontist knows exactly where to place them, since they know the vectors of force needed. It is not difficult to do in the office, and without any risk for the patient.

JORGE FASTLICHT, DDS, MS Mexico City, Mexico

Japanese orthodontists usually place miniscrews themselves. This is because we, the orthodontists, can control the timing, consider mechanics, note bone density, and place them where we need to. In relation to mechanics, patient cooperation, and service, it's much easier this way. However, I send a patient to an oral surgeon or periodontist if the patient needs to have miniplatetype anchorage or if he or she has a specific problem. Basically, putting a miniscrew into bone is not so difficult, but we need a consistent, systematic methodology taught in the orthodontic departments.

MASATADA KOGA, DDS, PHD Tokyo, Japan

My residents and recent graduates place all their miniscrews themselves. I place them myself as well. Palatal implants or zygomatic implants are placed by the surgeon.

I guess things are changing; more and more orthodontists are placing them, but the majority are still reluctant to do so. Their fear is the fear of the unknown: how big of an inventory, how much pain, can I cause damage, etc. It is much easier than they think.

BAKR RABIE, BDS, MS, PHD Hong Kong

It is the orthodontist who uses and places miniscrews for skeletal anchorage. We are using the micro-implants of Dentos Co. (Daegu, Korea) in our clinic. My colleagues in the area are using these same micro-implants or those of Dentaurum.

VIKAS SEHGAL, BDS, MDS Yamunanagar, India

In our three-orthodontist practice, we intend to use TADs whenever the need arises, and that is not often, fewer than five times per year. We have bought the kit and tools and will fit them ourselves in-house, having done the course. Other orthodontists in this region are using them, but we don't know how many or how often, or if they fit them themselves. The fitting procedure is straightforward, but convincing patients is a problem; it always is when injections and drills are mentioned.

ROBERT CERNY, BDS, MDS Newcastle, Australia

We are working now on using the miniscrews in the zygomatic process in combination with the Carrière Distalizer. We send the patient to the GP to place the screws at this moment, as the zygomatic area is a little more difficult for placement.

LUIS CARRIÈRE, DDS, MSD, PHD Barcelona, Spain I use them and place them with my more experienced colleagues. I'm trying to do it myself soon.

REGINALD MIETHKE, DDS, PHD Berlin, Germany

In Italy, either the orthodontist or the surgeon inserts the miniscrews. I personally have inserted several of them.

VITTORIO CACCIAFESTA, DDS, MSC, PHD Pavia, Italy

In my office, I place TADs myself, and I think that most Italian orthodontists do the same. DANIELE PAPADIA, DDS Verona, Italy

We definitely ask the orthodontist to do it. This is the same as in Scandinavia. We are currently compiling a data base for a multicenter study, and it would be nice if others wanted to participate.

BIRTE MELSEN, DDS, DO Aarhus, Denmark

I'm amazed at the Readers' Corner figures; in the U.K., my understanding is that we orthodontists are doing all the TAD placement. I certainly do all the Chesterfield ones.

JON SANDLER, BDS, MSC, FDS, RCPS, MOrth, RCS Chesterfield, England

I've watched this debate with interest and have observed a similar generation gap when I have run miniscrew courses and talked to colleagues here in the U.K. In essence, I strongly believe that orthodontists are the best clinicians to insert TADs (with the exception of miniplates). I work closely with several surgeons experienced in orthognathic, trauma, and implant surgery, and was both surprised and disappointed to observe how they handle miniscrew insertions. Quite simply, they fail to realize the delicate, relatively atraumatic, and precisely controlled three-dimensional nature of TAD insertion. This frequently resulted in suboptimal positioning and was one of the reasons I developed a 3D guidance stent. At least if they now insert TADs (alongside other surgical treatment), I can accurately prescribe the insertion positions and angles with a stent, rather than relying on their evaluation and tactile skills.

Conversely, we as orthodontists are used to working in close-up 3D detail (think how obsessed we are about bracket positions!), treating both patients and kit sensitively, and having an overview of the whole treatment and mechanics. Cost is yet another disincentive to involve surgeons. TAD techniques are evolving extremely rapidly, but if anything, it appears that the common clinical scenarios are becoming more standardized—hopefully this will make it less off-putting to those orthodontists yet to integrate them into their practices.

RICHARD COUSLEY, BSC, MSC, FDS, FDS Orth Peterborough, England

#### REFERENCES

- 1. Sheridan, J.J.: The Readers' Corner, J. Clin. Orthod. 41:258-261, 2007.
- Mah, J. and Bergstrand, F.: Temporary anchorage devices: A status report, J. Clin. Orthod. 39:132-136, 2005.
- Bowman, S.J.: Thinking outside the box with mini-screws, in *Microimplants as Temporary Orthodontic Anchorage*, ed. J. McNamara Jr., Craniofacial Growth Series, vol. 45, Needham Press, Ann Arbor, MI, 2008, pp. 327-390.
- 4. Tracey, S.: The nuts and bolts of miniscrews, Orthod. Prod., February 2006, pp. 22-24.
- Keim, R.G.: Editor's Corner: Miniscrew complications, J. Clin. Orthod. 41:719-720, 2007.

JCO thanks the following companies for supplying miniscrew images for this month's cover: Dentaurum USA (tomas), www.dentaurum. com; Great Lakes Orthodontics Ltd. (Absoanchor, Dentos), www.greatlakesortho.com; Leone-America (Orthodontic Mini Removable Implant), www.americantooth.com; Masel (Orlus, Ortholution), www.maselortho.com; Ormco Corporation (VectorTAS), www.ormco.com; Ortho Technology, Inc. (Spider Screw, HDC Italy), www.orthotechnology.com; RMO (Dual-Top), www.rmortho.com.