COMMENTARY

IMPLANTABLE DEVICES AS ORTHODONTIC ANCHORAGE: A REVIEW OF CURRENT TREATMENT MODALITIES

Vincent G. Kokich, DDS, MSD*

This article is an excellent overview of the evolution of implant anchorage in orthodontics. As the article clearly states, this evolutionary process has been occurring gradually over the past 20 years but has really picked up momentum in the last 5 years with the development of miniscrews and miniplates. In fact, these titanium anchors are actually inserted by orthodontists in some parts of the world. The authors also document the various situations in which an implant could be an ideal adjunct to orthodontic therapy, permitting difficult types of tooth movement that are not possible with conventional orthodontic mechanics. However, with every new technique there is also the risk that the technique will dictate the treatment plan for a specific patient even though another treatment plan could be more appropriate.

As each new technique gains popularity, the pendulum of application swings farther and farther away from reality, and, eventually, we could have a technique that is simply looking for an application. Have we not already experienced this with implant replacement for teeth? In restorative dentistry today many teeth that could possibly be saved are simply removed and replaced with implants because the technique is possible. In some situations, perhaps, it would be more judicious to maintain the tooth. However, when the pendulum swings far enough, our mind-set changes, and we discard sound judgment to streamline the treatment plan so that it fits with our new technique. This same mentality is now occurring with miniscrew and miniplate anchorage in orthodontics. I see case reports presented at orthodontic meetings and reported in orthodontic journals that document the use of implant anchorage to miraculously accomplish tooth movement that would not have been possible without the implant. However, in some of these case reports, the author has chosen a treatment plan in which the outcome has questionable logic. The use of implant anchorage in some of these situations was chosen simply because it was trendy and used an implant to facilitate tooth movement. Just because we can place screws in a patient's jaws does not mean that it is appropriate for every orthodontic patient. Authors and clinicians who fall into the implant anchorage trap have the sequence of the treatment planning in the wrong order.

In reality, the most important part of the entire treatment process is the diagnosis. And remember, there is only one diagnosis. There may be several treatment plans to achieve one's treatment objectives, but there is still only one correct diagnosis. Those who use implant anchorage inappropriately have only one treatment plan and tend to alter the diagnosis to fit their technique. So dentistry should be cautious. We are in the early stages of the implant anchorage craze. But I am confident that, as with all popular trends, common sense and science will show that implant anchorage is simply another tool that the orthodontist can keep in his or her bag of tools to create appropriate treatment options if and only if the correct diagnosis has been made for each specific patient.

Professor, Department of Orthodontics, University of Washington, section editor for Orthodontics, *private practice, Tacoma, WA, USA*