COMMENTARY

SOFT TISSUE CONE-BEAM COMPUTED TOMOGRAPHY: A NOVEL METHOD FOR THE MEASUREMENT OF GINGIVAL TISSUE AND THE DIMENSIONS OF THE DENTOGINGIVAL UNIT

Dennis P. Tarnow, DDS*

The authors are to be congratulated on coming up with a new technique for radiographically visualizing the soft as well as the hard tissues around teeth. With the use of computed tomography (CT) cone-beam technology being used more frequently in practices around the world, this simple and innovative technique of keeping the lips retracted during the scan will be of great use for clinicians as well as researchers. As mentioned by the authors, the present technique of sounding soft and hard tissues that has been used for decades is very invasive and requires local anesthesia to accomplish properly. That is why this noninvasive technique appears to make great sense, especially if someone is already getting a scan for any other reason. In fact, I cannot see why this technique should not be the standard operating procedure for all scans of the mouth. It makes sense to utilize this as it is not invasive and takes no more time to accomplish than a regular scan would.

This procedure may be used before all crown-lengthening procedures because it would be able to tell the clinician whether bone as well as soft tissue has to be removed for the procedure before an incision is made. This of course is presently done by sounding at the time of surgery but it would be a wonderful benefit to know this before the surgery without having to anesthetize the patient.

My only concern about this procedure is that it may encourage dentists to take CT scans when they may not otherwise need them to treat the patient. In other words, the clinician will have to decide whether this technique is valuable enough to expose the patient to the extra radiation of a scan that might not otherwise have been taken. The authors also use 40 seconds for the scan for better detail. This will have to be evaluated by further research to see if scans of lesser duration and, therefore less radiation, are as diagnostic as the three shown in the paper.

Again, my congratulations to the authors for creative thinking that will hopefully help make an excellent tool such as a cone–beam CT scan even more effective diagnostically.

Professor and Chairman, Department of Periodontology and Implant Dentistry, New York University College of Dentistry, New York, NY, USA

DOI 10.1111/j.1708-8240.2008.00211.x