QUICK TECHNIQUE

Two in One: Pilot Drill and Surgical Guide

MD Guide Provides Alternative to Fabricating Conventional Surgical Guide

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lacement of dental implants is a surgical procedure that carries some risks in surgery. These risks include proper positioning and angulation of dental implants.

Implant dentistry today is prosthetically driven, so proper placement is critical to ideal emergence profile and contour. One very important consideration that is often forgotten by the practitioner placing implants is proper spacing between implants and teeth, as well as parallelism. A new product that I recently discovered is quite clever and can be very beneficial for dentists placing implants, no matter what implant system they currently use or their experience level. This product is called the MD Guide (Figure 1).

The MD Guide offers an alternative method to fabricating a conventional surgical guide, whether

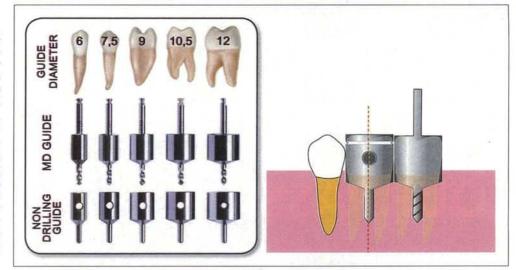


Figure 2. The drilling guides and nondrilling guides are sized at 6-, 7.5-, 9-, 10.5-, and 12-mm diameters, as depicted. The drill length is 7.5 mm and has a diameter of 2 mm for all the drilling guides.



Figure 1. The MD Guide Intro Kit contains 5 drilling guides and 5 nondrilling guides (or virtual teeth) in a convenient, fully autoclavable box.

this is simply a quick plastic vacuform retainer type of guide or something more sophisticated, fabricated by a dental laboratory. As you know, in theory, using some sort of a surgical guide when placing implants to ensure they are properly positioned can be helpful since a millimeter can make a real difference in the final implant crown fabrication. What is clinically useful about the MD Guide is that you are not changing your current surgical protocol or your dental implant system. The MD Guide just allows you to drill your pilot hole more accurately in terms of mesio-distal spacing and parallelism. Instead of using the pilot drill with your implant system, the MD Guide can be used instead. It is really a pilot drill and an alternative surgical guide combined. You are still drilling "freehand" but with more accuracy.

The MD Guide technique is quite simple to implement, which will be explained through a clinical case study showing 2 implants placed. The MD Guide Intro Kit contains 5 drilling guides and 5 nondrilling guides (or virtual teeth) that are specifically sized to match the mesio-distal dimension of the future restoration (Figure 2). Once the correct drilling guide size is selected, the cylinder is placed against the adjacent tooth to create your pilot hole (Figure 3). The MD Guide is used instead of the 2-mm pilot drill that comes with your implant system. Once the first pilot hole is made, the drilling guide is replaced with the exact same-

sized virtual tooth. For example, if you used a 9mm drill, you then place the 9-mm virtual tooth in its place upon completion of drilling your pilot hole (Figure 4). The MD Guide system will work for single placement or in the case of multiple implants. If an additional implant is being placed, you would continue the steps, but instead of estimating your second pilot hole, you will now align the drilling guide cylinder against the virtual tooth that was placed previously versus against the actual tooth, as was in the case with our first pilot hole in this clinical case (Figure 5). I have found it beneficial to take a radiograph of the placed nondrilling guides to ensure proper angulation, where in the past I would have to use the pilot drill or guide pin (Figure 6).

The MD Guide system provides a simple solution to more accurate mesio-distal spacing and parallelism, no matter what implant system or brand you may be utilizing. What I found most beneficial is that it is not changing my current surgical protocol; it is just helping make it more accurate. The MD Guide minimizes the stress of misaligned or malpositioned implants and can save time and money over conventional surgical guides. Lastly, it allows me to work efficiently and accurately in my dental implant positioning mesially and distally.

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Figure 3. In this case, a 9-mm drilling guide size was selected and placed against the adjacent tooth to create the first required pilot hole.



Figure 4. After the pilot hole is made with the drilling guide, the 9-mm nondrilling guide (or virtual tooth) is placed in order to prepare for the next implant. Dental floss should be utilized and placed through the hole to prevent any risk of the patient swallowing the virtual teeth.



Figure 5. Just as was completed for the first pilot hole, the same process or steps are repeated as required for the second implant being placed. In this case, a 10.5-mm drilling guide size was selected and placed against the virtual tooth to create the second required pilot hole.



Figure 6. The placed nondrilling guides or virtual teeth in preparation for radiograph to ensure proper angulation.