BEYOND RESTORATION
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CAD/CAM and Planning

By Steve Ratcliff (/spear-review/author/steve-ratcliff/) on February 23, 2015 | (/bookmarks/bookmark/3688

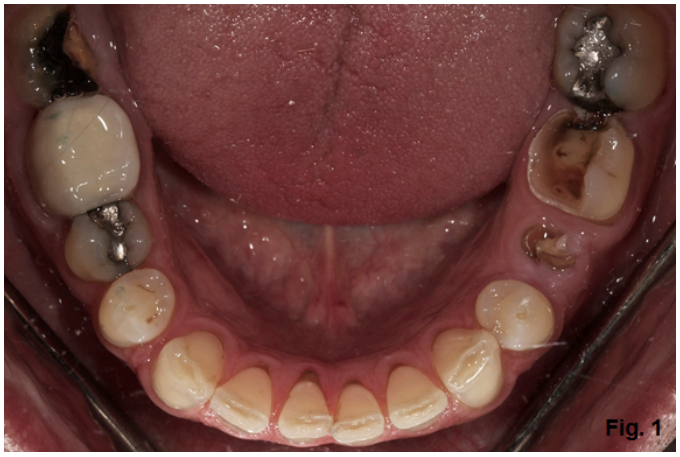
Fig. 1

I am not a dentist who chooses to use an in-office milling system. It just doesn't make sense for my small practice and low volume of patients. Yet, I still love the idea of virtual planning.

Dentistry has gone digital and fully embracing the possibilities doesn't mean you have to learn how to work with the software; sometimes it just means that you need to work with a lab who "gets it" and is willing to communicate.

I've worked with Matt Roberts for years and I most appreciate that he is always on the edge of technology. He has fully embraced CAD/CAM planning and milling in his lab, and has also perfected communicating with his doctors so they are in the loop and contribute to the planning process.

I recently completed a case with Matt that was pretty straightforward and made even easier to know we would succeed by using the CAD/CAM technology that is available.

The patient will have the lower second premolar extracted and an immediate Straumann Roxolid implant (https://www.speareducation.com/spear-review/category/implants) placed with an anatomic healing abutment at the time of surgery. (Fig. 1)

The healing abutment allowed the tissue to heal and pre-formed, to an extent, the emergence profile of the abutment and final restoration. I did an impression as usual with a closed tray impression post and sent it to Matt's lab.


Fig. 2

He scanned the model into his CAD/CAM software and planned the abutment based on the images I sent and the lab prescription, and also based on principles of emergence profile and restorative space.

The cool part is when he finished his digital design, he texted me the images of the implant abutments and the crowns so I could see were milled. (Figs. 3-6)

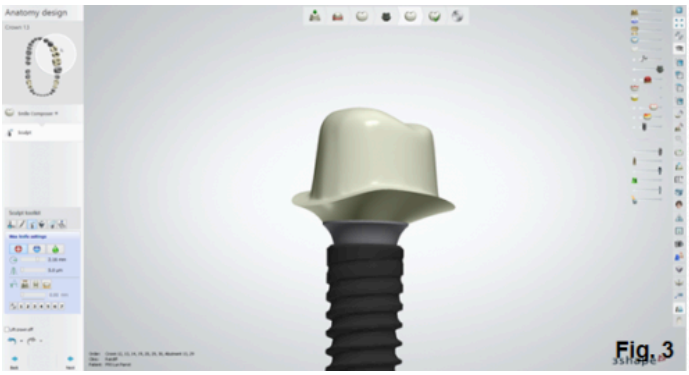
Fig. 3


Fig. 4

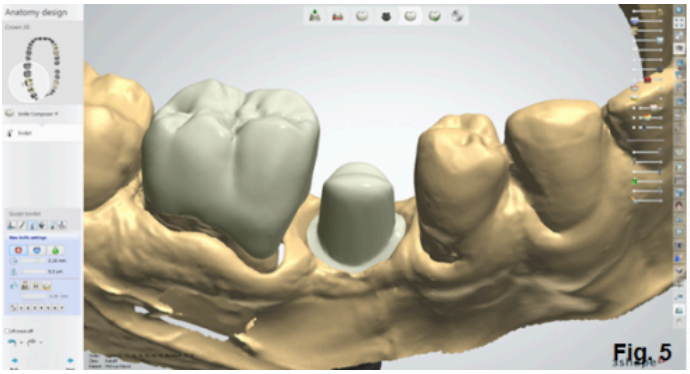
Fig. 5

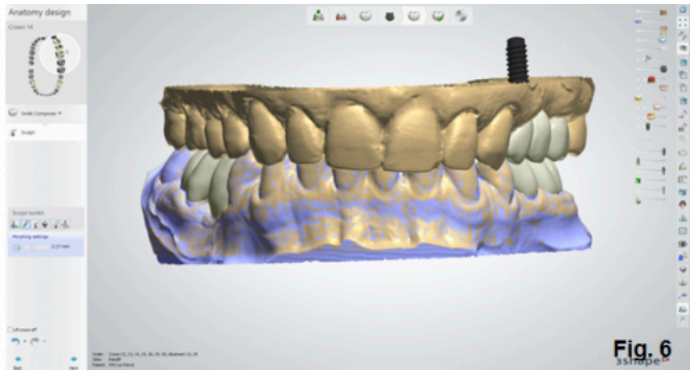
Fig. 6

I get to see the final shape of the restorations, the occlusal relationships, the shape of the abutments, the relationship of the abutment to the implant and to the tissue, as well as, any areas that might be thin in my crowns had I underprepared or not had adequate restorative space.

If there are changes to be made, Matt and I can do a GoToMeeting and he will make the changes while I watch, and once approved, send the final design files to his mill.

We seldom do a restoration that isn't designed in this CAD/CAM software. Even if he is going to press lithium disilicate, the design is done in the software and the wax pattern is either printed or milled prior to being invested and pressed.

In-office CAD/CAM technology is here to stay. It is a sound investment and patients love not having goo in their mouths.

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And the results are pretty darn nice! (Fig. 7)

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