Implant impression techniques comparative review: Transfer impression versus direct abutment level

By Zvi Fudim, DDS

The inaccuracy in dental implant impressions is a vast and unsolved problem. It is so serious that the high rate of osteointegration of the majority of implants is absolutely meaningless. Knowing that traditional transfer impression techniques seldom deliver a passive fit of a framework means that most bridges will end up with a failure (Fig. 1).

Different studies show that transfer technique is almost four times worse than the official requirement. Therefore, besides the mechanical issue, it is also a patient’s right to know that impression transfer methods are extremely inaccurate, and requires at least a warning and a legal consent. Patients are often misled by widely accepted sources that state:

“Success rates of dental implants vary, depending on where in the jaw the implants are placed but, in general, dental implants have a success rate of up to 98 percent. With proper care (see below), implants can last a lifetime” (WebMd.com).

Numerous in-vitro studies have examined implant restoration accuracy. There is no doubt about the fact that the transfer impression is to blame for the misfit of the framework, but what exactly causes the distortion has not yet been pointed out.

What is wrong in the transfer impression?

The first problem is that the transfer, which is mechanically caught in the impression material (such as PVS), does not become an integral part of the impression. In fact, it can be easily moved. However, due to the friction between the surfaces of the transfer and the impression material, it does not return back to its original position (Figs. 2a, 2b, 2c). That displacement cannot be avoided when the technician engages analogs into the impression. In other words, forces in the transversal breakage of the impression, a warning and a legal consent. Patients are often misled by widely accepted sources that state: “Success rates of dental implants vary, depending on where in the jaw the implants are placed but, in general, dental implants have a success rate of up to 98 percent. With proper care (see below), implants can last a lifetime” (WebMd.com).

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On the vendor side, there are more than 150 trade shows in the Unites States alone that tax vendor resources. While some meetings and shows are as strong as ever, many are in the decline. And when attendance drops at meetings, it is more difficult for vendors to realize a good ROI (return on investment). As a profession, we have come to expect vendor visibility (and often high visibility) at most major events. We ask vendors to support lunches and cocktail hours, supply tote bags and more, to the point that it is assumed they will always meet our needs. But are we meeting theirs? The way all of us learn has changed forever.

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xpAPce and XPsquared launched 24/7 online conference, tradeshow, and C.E. forum.

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(Original Source: xpAPce and XPsquared)
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