



Impression Taking Tips

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When D&S Dental Laboratory asked me to write up a step-by-step note on how I manage to get consistently readable impressions, I wasn't sure what I would write or what I do differently than anyone else, but here is my technique and the materials that work best in my hands.

I try to keep my initial marginal preparation at the gingival crest or supragingival. One of my assistants then takes over and packs two stacked retraction cords around the tooth, leaving a short tail on the second one for easy removal. They first gently pack a #0E Gingibraid cord to the depth of the sulcus. This is followed by a #1E Gingibraid cord packed on top of the #0 cord where possible (some areas of extreme health or buccal recession will not allow the #1 cord to be packed). We sometimes will use Hemodent (Premier) on the cord, but this is often not necessary. One must remember to be careful with the use of racemic epinephrine impregnated cord in medically compromised patients. We may also use Access Edge retraction paste by Centrix if additional hemostasis or retraction is needed. It should be noted that the retraction cord must be handled with latex-free gloves or the setting of the impression material in the sulcus may be compromised. (Does anyone still use latex gloves??) The cords are left in place for five minutes. The #1 cord is then wetted and removed. At this point, I normally refine my margin preparation and drop it to the level of the newly retracted tissue, creating an obvious continuous, circumferential chamfer finish line, being careful not to abrade the tissue.

My impression is taken using Virtual XD from Ivoclar Vivadent. I use light-body material with an Intra Oral Tip from Benco on the mixing tip of the gun while my assistant loads a triple-tray with Virtual XD heavy-body material. If there is some blood or saliva around the preparation, the Virtual XD seems to displace it well. The material is allowed to set and the impression is removed, rinsed and dried for inspection. If the finish line is not totally visible, another impression is taken immediately as the tissue will start to rebound quickly. There is NO compromise in this step. If I can't see the margin completely, it will not show up on the model and the case will be less than ideal. I have a soft tissue laser but I rarely need to use it because this technique is so predictable. One of the main keys for success is careful packing of the retraction cord. My assistants accomplish this very well!

