My Single Tooth Isolation Technique

Restoring Class III and IV composites can be challenging. Check out this reliable technique from one of our members.

This is how I isolate most of my anterior restorations.

Fig. 1: Subgingival decay
Fig. 2: Front view
Figs. 3 & 4: After removal before shaping

I get great contacts and total isolation. When the whole angle is missing I build the facial back to full contour and then just fill in the lingual. I am able to round and shape the embrasures because there is no mylar strip in the way. I have been doing this for more than 20 years so please nobody tell me it doesn’t work.

Nice work! How do you control the gingival flash? It is such a pain with Class III.

I do it free hand with a very skinny flat composite instrument. The 212 and dam retract the tissue for visibility. The only tricky part is getting the dam on. I can even get up and do hygiene checks because of total isolation.

Here’s another example. I was asked about contact. What do you think?

continued on page 40
hubie38
Posted: 3/22/2010 • Post: 5 of 140

Do you use the rubber dam as your interproximal matrix, per se, or do you still use a mylar strip or some other form of separation?

satchdds
Posted: 3/22/2010

The two posted were without mylar strips (I don’t get great contours when I use a mylar). I need to use a strip sometimes on the gingival area to contain the material but never in the contact area.

Give it a try. Make sure the dam is hygienic thin dark.


Patient unhappy with composite #9.

kdw
Posted: 3/29/2010

Do you wedge prior to placing the composite? If not, is it just that the rubber dam is stretched so thin that you end up with a closed contact?

Also, what thickness of rubber dam is that?

Thanks for the posts! That last composite looked great.

satchdds
Posted: 3/29/2010

Ken, I really don’t have room for a wedge with the 212 clamp. The rubber dam is hygienic thin dark. Punch a very small hole, size 1 for laterals and lowers and size 2 for centrals.

There will be a learning curve to place the dam. Test the 212 before placing the dam to see if the 212 will hold nice and then set aside. Then I stretch the dam over the tooth, have my assistant hold the lingual so I can see a little of the palatal tissue and I hold the buccal also seeing the tissue. Then I slide the 212 over until it locks in under the CEJ. Make sure to invert the dam. For the large build-ups I start on the facial and build toward the contact with as close to final anatomy as possible creating a Class III lesion. Then I work from the lingual.

mcoh7994
Posted: 4/18/2010

I absolutely agree it’s great! I’ve been doing the same thing for several years and it works. It’s fantastically easy, effective and fast! My slight variation is that I place the index finger to build up the palatal, if required and then build up the facial.

Great stuff!
Satch, do you ever have problems with the clamp killing the gingivia, or it hurting the patient? Anytime I use the rubber dam (which is pretty much endo only) I give lingual anesthesia, otherwise I have patients saying it hurts. Most of the time I have to grip a little bit of gingivia (about half the time or the clamp slips if it's just one tooth and doesn't fit exactly right). Do I just need more practice with placing a clamp?

Good question, I always try on the 212 or 9 clamp before I place the dam just to make sure it will stay on. I slide the clamp up into the sulcus while it is touching the tooth. Very seldom in 20 years have I needed to put even topical on the palate. Sometimes when the lingual anatomy is very flat I put a little flow (not bonded just adhered to dry tooth) to tack the clamp down and keep it from moving.

Figs. 12-15: This young boy just got his braces off.

Fig. 14: On #7 mesial had an existing MFL that was leaking.

Fig. 16: More anterior isolation

Figs. 17 & 18: Prep with uneven facial bevel

Fig. 19: How it looks prior to cut back

Figs. 20 & 21: Mirror view to see facial contour and occlusion check

Great technique! Thanks for taking time to share so many photos. I will have to give that one a try.

Figs. 22 & 25: One more from today. I lost my way and it needs some shaping.
Fig. 26: #8 will just be a repair.

Fig. 27: I did trim a little more from the edge after seeing this photo... maybe at some point I’ll get to the mesials.

[Posted: 6/1/2011]

Figs. 28 & 29: Face plant right before sister’s wedding.

Fig. 30: #8

Fig. 31: #9 after Surpass (Apex Dental Materials)

Fig. 32: Free hand buildup of the lingual with the body shade. Notice the blood stays on the inside.

Fig. 33: Enamel added over the body. This is before any shaping or white decal-calified specs added.

I have to mention Seamfree (Apex Dental Materials) makes this process so much easier. Thanks. ■ JK

Very nice treatments, Satch! There is something about great isolation that allows one to focus on the details without worrying about contamination. Your patients are lucky to have found you. Regards. ■ Ed