Ligmaject and Septocaine

A discussion among dental professionals on the message boards of Dentaltown.com.
Log on today to participate in this discussion and thousands more.

About every six months I have to bring this up, sorry for the repetition. I cannot begin to express how much this technique has altered my practice. Today I sat down with a rather squeamish patient at 8:10 a.m., numbed him with absolutely no pain, and extracted #31. He left at 8:20. Before Ligmaject/Septocaine, I would have been in the room for an hour, trying to block the IA [inferior alveolar] and never getting him completely numb. I am amazed. I haven’t given more than two blocks in the last year. Operative appointments that used to take an hour (30 minutes waiting on anesthesia) take about 15 minutes now. I’ve had to retrain my staff on scheduling. I still use infiltration on maxillary, I guess because it’s just so easy and not painful, but I LOVE not giving lower blocks. After refining my technique with many cases, I can actually numb a lower molar with as little as two clicks, sometimes just one. Just curious if others have benefited as much from this. Thanks.

I’ve read some of the threads on this topic, but please go over your technique to allow me to see if I need to change anything. Thanks in advance. Pat

I’d love to hear more about your technique. I have never had much success giving intraligament injections. I just can’t seem to feel the ligament. I would really like to get rid of my lower blocks. Thanks in advance. Jeff

For me, mandibular arch – I have no problem 90% of the time from premolar to premolar for extraction, endo or surgical implant placement. First molars are about 60%, second molars… I always give blocks now. I think age and periodontal involvement are a big factor. If the patient is younger with a lot of strong bone and a thick jaw without periodontal involvement, I’ll say go for the block. Maybe because I don’t use Septocaine, my technique is not as successful as some others.

Ever had any post-op issues with injecting Septocaine directly into the PDL [periodontal ligament]? Rpoe, I’d be interested in knowing your technique for PDL injections too. I, for one, am interested in revisiting this. I have read too many long-winded threads that left me more confused than confident with this injection. I have the Miltex PDL gun, X-short needles, Septocaine, VibraJect and good topical. What do I do to get lower first and second molars numb enough for restorative, extraction or endo, short of a block? Thanks.
Count me as another who virtually never gives IA blocks anymore. Even for second molars, I use a combination of local infiltration and PDL for any kind of restorative treatment. I have not had any more negative postoperative sequella than before. ■ Mike

I could also use some refresher in technique. I did notice the increased incidence of reversible and irreversible pulpitis after Septocaine in the PDL. On the other hand, I was using a PDL injection because the block worked poorly in those cases to begin with, so I was probably trying it on irreversible cases anyway. I usually don’t have too much of a problem with IA. How can you do the PDL in two clicks? I am always concerned, not to put too much pressure in. I am getting the needle as deep as it would allow and bend it frequently. In fact, my assistant started to grab a couple of needles when setting for PDL. I will be thankful for any help with the technique. ■ Anna

I’m ready to try the PDL again. This is what I think it involves after reading posts... please feel free to comment. I have the Miltex gun-type syringe, but [I] don’t think pen or gun style really matters that much. It’s personal preference. So, first step is to apply the topical to dry mucosa and wait one minute. Then infiltrate with Septocaine in the mucobuccal fold (I guess one would consider the Vibraject here if your infiltrations are hurting). Wait a minute and then inject into the PDL SLOWLY (one minute) for a total of one click on the facial. The needle should be into the PDL so that there is no leakage of anesthetic. If there is, you are not in deep enough. Then give another click into the PDL on the lingual. Is that it for those who are doing this on a regular basis? Thanks. ■ Dan

Hi Dan, you’re close. Topical, then infiltration with Septocaine and wait one-to-two minutes, using a Miltex (best for calibrating back pressure) syringe place 30-gauge X-short needle into PDL (have an assistant suction in case of Septocaine leakage). And here’s the key: Inject with Miltex so that it takes 20 seconds to complete one click. If it takes longer than 20 seconds you have too much pressure, so wiggle the needle back a little and try again for the 20 seconds, per click. Look for attached tissue blanching as an affirmative sign. If the PDL is taking less than 20 seconds, then you have too little pressure, so insert the needle a little deeper and try again for the 20 seconds; blanching is a good sign. By having the infiltration first, you don’t have to concern yourself with patient discomfort as you learn the technique, and the infiltration will make the anesthetic effect last much longer. I do these daily for endo, operative, C&B [crown and bridge] and extractions on lower molars. Never block a kid, use infiltration PDL, as needed. ■ Jim

Another is sold by Septodont and works great. It is called the Paroject. ■

Dan, I go for linguals (with infiltration/PDL) on:
1. Hot endo tooth.
2. Extractions.
3. C&B or operative that goes subgingival requiring cord pack or electro surgery.
Mid-lingual in the furca, PDLs are very effective. ■ Jim

I don’t even use topical. I just place the short needle under the gingiva and let out a drop and allow that to anesthetize, for about five-to-10 seconds and then apply pressure; I believe this is Scott Perkins way of doing things. Patients don’t feel any pain. Of course, I have my assistant suction right away so the patient doesn’t taste any anesthetic. ■

I have tried this technique several times on lower premolars and molars. I have tried it just for operative. I have not been able to get adequate anesthesia and I am doing exactly what people are describing. I use a Paroject from Septodont and I get good tissue blanching and good pressure. So, what the heck am I doing wrong? I would love for this to work. ■ Swandog

Regarding specific technique, I think jebdmd’s post pretty much sums up my technique. Only one thing to add. I place the needle directly into the bifurcation, after initial drops into the sulcus for topical, I go 3-4mm under gingiva into the bifurcation, and slowly, with noted backpressure, express one-to-two more clicks (takes about a minute to do this). The backpressure is important and blanching is always a good sign. I rarely infiltrate in buccal mucosa first, the initial click/irrigation in the sulcus seems to do the trick. I always stress to the patient that their tooth will be very sore to bite on for two days, that I’ve “bruised” the ligament around the tooth. I kind of over call it, and usually they tell me later it wasn’t nearly as bad as they expected. There is no doubt; however, that you can overdo it and really damage the attachment (pictures have been posted of localized trauma that is pretty sore). The key is slow, gentle pressure and limiting the anesthetic to just a few clicks. If I don’t have profound anesthesia, I will go to the lingual and use one-to-two more clicks. If this doesn’t get it, I’ll block, but that is rare. I am much more aggressive with number of clicks when I’m extracting a tooth.

I like the pistol-grip syringe. I bought a “pen” type from Septodont, and in my hands, it just wasn’t good. I couldn’t get the proper angle or gauge the pressure as well. I just wasn’t used to it. I feel that the Septocaine gives much more consistent anesthesia with these PDL injections. ■

Hi rpoe, I agree with infiltration is not always needed for simple and small operative. I give the infiltration on larger cases, as I find the length of time the numbness lasts is increased,
and a lot of patients don’t feel too good about the drill unless they feel some lip numbness. Also, the infiltration allows someone trying to learn PDLs to concentrate on their technique knowing the patient is comfortable.  ■ Jim

Jim, thanks for the reply. I also go for the furcation. I did not experience any tissue damage in this area. I did have a history of tissue damage once, when I have tried to anesthetize very sensitive #19, including MB, DB and furcation areas. Patient came back with “sloughing” tissue in MB and DB (almost NUG [necrotizing ulcerative gingivitis]-like, but yellow), but no damage in furcations, buccal or lingual. The tissue healed normally. (I did my PDL quite slowly, so I have assumed that the circulation must have been compromised.) Did anyone tried to use 0.5% Marcaine in PDL? I would like it to last longer. ■ Anna

No great success with intra osseous or x-tip. I just did a “warm” #19 (dull ache with slight percussion sensitivity and periapical radiolucency on the distal root). One carpule of Septocaine infiltration aimed at the distal root apex, waited one minute then one click of Septocaine in mid buccal furca PDL with blanching and two mid furcal PDLs on the lingual. I waited five minutes and did the endo for an hour. The patient complained of soreness. Gave one carp of infiltration again aimed at distal root and got immediate anesthesia. Total Septocaine 1:100,000 was two carpules and three clicks. Total endo time with fill through crown about an hour-and-a-half. [Posted: 2/6/2007]

Last patient of the day. #19 build-up crown prep. One carp infiltration of Septocaine at buccal distal root apex, wait one minute, one click mid buccal furca PDL. Two clicks mid lingual furca PDL. Wait five minutes, prep. Infiltrate for electro surgery. Mach II impression with temp. ■ Jim

Some teeth are just very difficult to numb. I had a tooth #30 IA block, it showed typical signs of numbness. I didn’t assume the tooth was numb at this point. So, I test it with air. About a half a carp of Septocaine was used in PDL in buccal furcation, lingual furcation and at some line angles. This still didn’t do it. So, I used the Stabident mesial of the tooth with one-third carp Septocaine that I still have in the PDL syringe. This still didn’t do it. Some of the edge was taken off, but I still resorted to the intrapulpal. Should I have gone straight to the Stabident with a boat load of anesthetic? I’ve had that fail for me before too. ■

I’m glad I saw this thread and decided to try the PDL technique one more time. It really is working this time around. I think the key has been, and as I learned on this thread from Jim, to infiltrate aiming for the apex with Septocaine, about one-quarter of a carp, is doing it for me. Then wait a minute and give a buccal and lingual PDL one-to-two clicks over 20 seconds with the Miltex gun-type syringe using lidocaine 1:100,000 epi. And then immediately test with endo ice and start working if no response. I did #18/19 today, build-ups and crown preps and some electro surgery too... that took forever (well, two hours) and I was worried I would run out of time, but no problem. As far as Citanest and no burning. I subscribed to that theory years ago, but read something saying it was not true and eventually gave it up. I don’t
really know, but I doubt it stings less than other anesthetics. Septocaine, however, is clearly the worst tasting anesthetic ever and I would not use it for a block. On another patient today I had #17,18,19 and 20 for onlay preps and wimped out and just gave my usual IA block. It seemed easier (for me and the patient) than eight-to-10 injections the PDL way. I lucked out and got it the first try and the patient was numb two minutes later. All in all a good day with anesthesia.

Hi Dan – you got two hours out of 1/4 carp of Septo infiltration and a few clicks for PDLs. That’s great! Maybe a full carp on the infiltration is overkill? When was your last injection before the eSurge? Thanks. ■ Jim

This morning I tried out the Ligmaject on my own #30. The gingiva is dark red/blue very sore, and the tooth is very sensitive to percussion. When I was injecting, the tissue blanched. Should blanching be avoided, and if so, do you just pull up a bit? ■

Jim, All I gave was the 1/4 carp of Septocaine as an infiltration and then 1-2 clicks on the facial and lingual of #18 and #19. Pt was numb throughout...I probably did the electo surgery an hour and 15 minutes (or maybe 1 and 30 min... don’t remember) after I gave the anesthetic. How long do you get with lower first and second molars? ■ Dan

Hi ramotar – tried it out on yourself? Wow! You want tissue (attached gingiva) to blanche but excessive pressure is counter productive. That’s why the “20-seconds-per-click” rule (from the AGD study) is so helpful. I give one carp of Septo 1:100 infiltration, wait one minute then a few clicks of PDLs at the appropriate spots and you’re good to go.

The one carp of Septo (IMHO [in my honest/humble opinion]) acts as a a well for the PDL, and getting 1-2 hrs. of anesthetic is normal. My first patient is a 40-year-old lady for #18 b-up and crown prep.

I’ll do the one carp infiltration aimed at DB root apex, wait 60 seconds, give blanching clicks mid buccal and lingual and wait 60 more seconds and start prep. ■ Jim