Mandibular Block Woes

Jim Hazlett | Total Posts: 1,312 | Member Since: 2/23/2002 | Location: Sarasota, FL | Posted: 10/5/2005 4:19:33 PM | Post 1 of 112

Lately I can't get a block to work. It's like I'm injecting saline. I aim for the middle of a triangle created by the pterygomandibular raphe, my thumb on the anterior border of the ramus, and the occlusal plane of the lower second molar, go in until I hit bone, back off a bit, aspirate and deliver it. Never am I getting a positive aspiration. Driving me nuts. Use PDL [periodontal ligament] with Septocaine as an adjunct, but find it less than predictable as well. HELP!

doctortooth1 | Allen Robinson, DDS | Total Posts: 142 | Member Since: 3/25/2005 | Posted: 10/5/2005 5:07:55 PM | Post 5 of 112

Been a long time; they started using GG [Gow-Gates] just when I was getting out of school 25 years ago, I think. You aim for the ear with a stronger angle and go slightly deeper than you would think.

I'll tell you what this wet-gloved enamel gouger does when a regular mandibular nerve block doesn't work or is slow, and this has worked almost every time. Aim high and give half a carpule, then aim low and give the other half. Of course, I hit bone with the lower half before going too deep. And give a real strong angle because some of the people have flared rami that hide the nerve. That is probably just a GG, but I don't think about names. I rationalize that some folks have a plexus instead of a nerve trunk.

Matrix | Erik T. Garcia, DDS | Total Posts: 246 | Member Since: 3/16/2003 | Location: Rosenberg, TX | Posted: 10/5/2005 5:56:47 PM | Post 9 of 112

I always use a 27-gauge long [needle] for mandibular blocks. I bend the needle some towards the bevel to compensate for flaring of the ramus. A highly regarded oral surgeon in Houston taught me that little trick 15 years ago. Made my life much easier. I started using Septocaine for all my blocks about three years ago. Now I feel like I'm on easy street. Really, mandibular blocks are the least of my worries. There was a time when I would have never dreamed about making such a statement.

peachdental | Jesse H. Roberts III, DDS | Total Posts: 257 | Member Since: 7/19/2004 | Location: Ruston, LA | Posted: 10/5/2005 6:00:31 PM | Post 10 of 112

Are you giving a long buccal? I routinely give the long buccal, and have had great results.

Designated Pot Stirrer | Natalie Peterson, DDS | Total Posts: 12,354 | Member Since: 8/16/2003 | Location: Menomonee Falls, WI | Posted: 10/5/2005 7:30:20 PM | Post 12 of 112

Septocaine for my IANBs [inferior alveolar nerve block] really didn't make any difference for me. I was still missing the same percentage, the ones that I did hit were REALLY numb, but the ones I missed were still not numb. I have NEVER used Septocaine for a Gow-Gates; I have not needed to.

drdice | Jim Takacs, DDS | Total Posts: 2,650 | Member Since: 6/13/2000 | Location: Ontario, Canada | Posted: 10/5/2005 7:53:17 PM | Post 14 of 112

These things go in cycles...not sure why. You nail everything, or almost everything for months and then you get into a bad spell for a week or so. Just stick to the fundamentals of always contacting bone at two-thirds to three-quarters the length of a long needle about half-way up the ramus. I almost always give two blocks as a standard.

continued on page 18

continued from page 16

superdiver | David Albertson, DDS | Total Posts: 12,673 | Member Since: 1/20/2003 | Location: Ketchikan, AK | Posted: 10/5/2005 9:20:00 PM | Post 16 of 112

Gow-Gates:

1) Have the patient open as wide as possible.
2) Insert the needle very high, but not too sharp of an angle at first. Don't "push" the needle in, just let the weight of the syringe take the needle through the tissue, also don't start injecting until you get almost to where you want to be.
3) Once you get about 1/3 to 1/2 the way in with the needle, make the angle much sharper, like all the way against the opposite side of the mouth and AIM FOR THEIR EAR.
4) Inject SLOWLY and don't forget to aspirate. Leave about 3/4 of the Septocaine (I use almost exclusively Septocaine) where you want it, and then slowly pull the needle out and deposit the rest of the Septocaine near the surface of the tissue before the needle comes out. This gets the buccal most of the time.

You will most likely need to do the mental if you are doing a first molar and a mylohyoid as well, on the tough ones.

price244 | Total Posts: 45 | Member Since: 11/26/2004 | Posted: 10/6/2005 11:27:20 AM | Post 17 of 112

I agree 100% with Natalie—when I switched to Septocaine my success rate went to 100% and I did not change my technique. I honestly believe Septocaine would diffuse through a steel plate! There is no other local that spreads through soft (and hard) tissue better than Septocaine. Face it, none of us know exactly where the IAN is on any patient, all we do is get close—let Septocaine do the rest, but just use one carpule on each side.

Designated Pot Stirrer | Natalie Peterson, DDS | Total Posts: 12,354 | Member Since: 8/16/2003 | Location: Menomonee Falls, WI | Posted: 10/6/2005 5:33:50 PM | Post 27 of 112

Dave, I always try to contact bone. That way I know where I am. Otherwise I'm just shooting in the dark...or the parotid gland...or the facial nerve...or wherever. I have much more accuracy if I do contact

continued on page 20

continued from page 18

bone. I don't HIT bone, but I do contact it and then draw back slightly. The only time I bend a needle is if I'm giving a PDL!

flyfishdr | Peter | Total Posts: 1,948 | Member Since: 2/26/2004 | Location: Calgary, Canada | Posted: 10/7/2005 8:48:42 AM | Post 41 of 112

Jim, I think I can help. You don't need to change your technique. If you are getting anesthesia where you're not getting signs from lip or tongue and maybe just a little on the buccal (like your injecting saline as you put it)—you're too far anterior on the ramus. Now you say you're going in half the length of a long—about 17 mm. Well, you're probably not even half.

Here is what I recommend. For a few cases in a row take an endo stopper and slide in onto the needle at a depth of 20 mm. You use this for an accurate depth gauge. Now you are doing a low block, so the depth you're looking for is about 16 mm to 20 mm. For a high block, which you're not doing, the depth is slightly longer.

Okay, say you slide the needle in and by judging the width of the ramus (anterior-posterior width) you have a medium-to-wide ramus. If you hit bone at say 15 mm, don't start over. Inject a couple drops here, then move your hand medial, so the needle tip is directed more distal, and slide the needle until you reach 20 mm, and inject here.

If you use the endo stopper technique a few times you'll gauge depth better and help you get on track. Let us know how you're doing.

jjperna | Total Posts: 26 | Member Since: 3/7/2003 | Posted: 10/7/2005 9:39:23 AM | Post 47 of 112

IAN: Use 27-gauge long and 4% Septocaine (99% success rate).

Gow-Gates: Use 27-gauge long and 2% lidocaine (99% success rate).

For those 1% cases that don't work, infiltrate (slowly) 1/4 carp Septocaine at the junction of the free and attached lingual gingiva (aiming for the furcation) of the tooth you're are attempting to anesthetize. In rare cases, I also infiltrate directly in the buccal furcation. Often I use only this technique when a patient requests not to have entire lower lip numb. Can be slightly uncomfortable, but patients are forgiving of this because lower lip is not numb and I am able to restore teeth bilaterally at same appt! Very high success rate!

super2th | Alan | Total Posts: 3,396 | Member Since: 4/14/2000 | Location: Illinois | Posted: 10/7/2005 9:41:14 AM | Post 48 of 112

Ever notice that sometimes after you've hit bone, and then gone back in for another injection with the same needle that the needle kind of "pops" through the tissue? It doesn't glide smoothly through the tissue because the very tiny tip of the needle is "fish hooked." It's this fish hook that can lacerate the numb lingual nerve upon withdrawal and can cause paresthesia. If this happened on the first injection/withdrawal...and then especially if you inject on the second injection with Septocaine instead of lidocaine the problem can be exacerbated.

I think it's been over two years since I've given a block....I just said no a couple years ago...my success rate is much higher now. But, nothing is 100% in our profession.

jjperna | Total Posts: 26 | Member Since: 3/7/2003 | Posted: 10/7/2005 10:20:30 AM | Post 52 of 112

EXCELLENT observation! I've never heard of this perspective, but it makes absolute sense.

flyfishdr | Peter | Total Posts: 1,948 | Member Since: 2/26/2004 | Location: Calgary, Canada | Posted: 10/7/2005 10:32:21 AM | Post 53 of 112

This bent tip is a valid point. If you never re-inject with the same tip this won't happen. I don't do this though. I run the tip back toward me over a two by two gauze. If it catches the tip is bent. Then you need a new one.

kmhaemigdds | Karl M. Haemig, DDS | Total Posts: 299 | Member Since: 5/17/2005 | Posted: 10/7/2005 11:14:16 AM | Post 54 of 112

I had a positive aspiration through a 30-gauge on an upper infiltration today. That said, it's easier to see an aspiration with a 27-gauge.

continued on page 24

continued from page 20

blazeheliski | Bill | Total Posts: 1,392 | Member Since: 5/16/2002 | Location: Oregon | Posted: 10/7/2005 2:53:03 PM | Post 56 of 112

I have been using the 30-gauge needle for the last 16 years for mandibular blocks. I always bend the needle so that if it deflects, it will go toward the bone. I always use one carp of 4% plain to start, and follow with 2% mepivicaine with some vasoconstrictor. This gets 90% of blocks. For the other 10% some infiltration with Septocaine finishes the job. Find something that works for you and stick with it.

dhirji | Total Posts: 734 | Member Since: 8/20/2003 | Location: Brampton, Ontario | Posted: 10/9/2005 10:31:50 PM | Post 59 of 112

Hi Jim: The most simple things in life usually are most often overlooked! Have the patient seated instead of lying them back! The rest is as described by one of the many posts: Have your needle parallel to the occlusal plane which should also be parallel to the floor, if in a seated position. Use a 27-gauge needle, and inject in the area that is disected by half of your thumb that is holding the lower jaw. Position the needle over the premolar area and try it. If you don't gently touch bone, pull out and redo. I hardly miss a block! Please try it and let me know!

brevara | Rob | Total Posts: 819 | Member Since: 9/24/2002 | Location: Portage, WI | Posted: 10/11/2005 12:05:38 PM | Post 64 of 112

There is frequently innervation of the lower molars from the mylohyoid nerve, which runs inside the jaw about halfway up. To give this block, retract the tongue toward opposite side and run the tip of the needle along the bone and in between the roots of the molar(s) you are treating; run the needle as deep as you need to, to get 3-4 mm past the mid-level and start injecting while withdrawing the needle slowly. I can't remember when I last failed to get deep anesthesia with this block and by injecting while withdrawing you don't have to worry about injecting into the nerve. This also is a very painless injection for the patients at large. I was doing this one for so many years that I'd convinced myself that I was the inventor, was going to call it the Brevard Block, but then I read on DT [Dentaltown] that some schools teach this block. I use Septocaine for every block.

lorinmaser | Total Posts: 1 | Member Since: 12/12/2002 | Posted: 10/15/2005 8:22:10 AM | Post 75 of 112

Try this and see if it doesn't improve your success in obtaining a mandibular block. Place your thumb on the anterior border of the ramus and your forefinger on the posterior border. Remove your hand holding this position. Now place your syringe needle halfway between your thumb and fore finger. This is the depth that you want to insert your needle, halfway between the anterior and posterior border of the ramus. Most likely you're not inserting the syringe needle deep enough. I have used this technique with great success. Good luck!

gpeter52 | Total Posts: 1 | Member Since: 6/16/2004 | Posted: 10/16/2005 1:03:39 PM | Post 83 of 112

I always take a panoramic film of each new patient, and from these, one can clearly see, in most cases, where the mandibular foramen is located. This and traditional landmarks have greatly assisted me in delivering the LMB [local mandibular block], especially as pertains to depth, and angulation in relation to the occlusal plane of the lower teeth.

I usually suspect bad anesthetic if I miss three or four blocks in a row on three or more patients, and will usually open a new can and see if that helps. Living in the northern reaches of Canada, shipping product in the heat of summer, or cold of winter can be unpredictable. This is usually confirmed if the same anesthetic seems to be problematic in the upper arch, which is usually more predictable. I know I might be in trouble if anesthesia is wearing off very quickly just after I've completed a bicuspid comp or similar. Hope this helps.

toothinator | Total Posts: 1 | Member Since: 2/5/2003 | Posted: 10/17/2005 10:32:54 AM | Post 89 of 112

I learned a great combination from the endo guys that I use all the time with all my blocks. It works great! Inject Carbocaine first and follow immediately with a carpule of lidocaine. The two have a synergistic effect. You can't beat it!

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