Topical Anesthetic for TAD Placement

What kind of anesthetic do you use for placement?

For those of you who use TADs, what kind of anesthetic do you use for placement? Topical or injection? If you use only topical, what brand do you use and where do you order it? Anyone use a compounding pharmacy to have it made locally?

Dec 4 2011

I use both, but only a small bit of local. The topical I use is made at a local pharmacy. He uses a more hydrophilic base to give it more absorption, and his version of EMLA is pretty good. I haven't tried it without local, yet. But, once I get a better feel for this EMLA I may forgo using topical in most situations.

Dec 5 2011

I wonder if there is any advantage to using a local compounding pharmacy over a more commercial compounding pharmacy that makes the stuff everyday? I would imagine that with a local compounder you'd have some variation in your end products. That could be a good thing I guess as was mentioned earlier about extra hydrophilicity, etc. I've gotten always TAC 20 from Professional Arts Pharmacy. They package it in a pump now, which I really like because it's conservative and there's never a question about contamination. Takes a second to order/refill and I think costs ~$40.

Since we're on the TAD topic – at the TAD forum in Las Vegas last month [Editors Note: In 2011] I was amazed by a few things present in almost all lectures:

1. Almost everyone was electing to work from the palate and not the buccal
2. Almost everyone was using some form of handpiece driver system
3. Almost everyone was using 1/4 carpule of lidocaine.
4. I don't think I even heard a mention of the various spring loaded anesthetic “jets.”

Quite a difference from a typical miniscrew lecture say from a year or two ago.

Andy

Dec 5 2011

I took my first TADs program in Dallas 10 years ago given by HS Park. He required an engine drive contra angle set up. I was thinking this was overkill but I've used if for 10 years and it is great. The only system that really works well from the buccal is C-Implant.

Great comments. Thanks.

Andy

Dec 5 2011

Andy, do you use any local injection with the TAC? As far as consistency, there is some variation in the viscosity of the Eutectic Mixture of Local Anesthetics (EMLA), but it appears to work the same every time. I think pharmacists who compound day in and day out can keep the actual ratios the same. It probably comes down to the actual variation of the base from the manufacturers with each batch.

ptpdmd

Dec 6 2011

continued on page 20
Andy, you did not mean 1/4 carpule on the palate, did you?

[Posted: December 6, 2011]
Can someone explain the difference between EMLA and 20% TAC and are there indications for one or the other? Thanks.

[DEC 6 2011]

Yes, 1/4 carpule septocaine. I assume it was after a few minutes of profound topical. I wouldn't want a palatal injection without strong topical. Why? Do you think that quantity is too large or small?

[Posted: December 6, 2011]
Very rarely do I use local with TAC for mini screws but I haven't been hot on palatal placement... until my re-education last month. Yesterday I did end up using TAC and <1/4 carp of septo for a nasty re-exposure of a palatal cusp. I had to free up an embedded chain ligation with the laser. I've found that going down more than two links into palatal tissue usual requires local. Good news is that nobody ever even flinches.

[Posted: December 6, 2011]
EMLA is a lower concentration of locals. Usually lidocaine and prilocaine, both 2.5%. Never used it but I've heard from the laser crowd that it tastes like absolute $&@&. I think that it became popular again because of oraqix.

It's interesting to note that there's another really popular compounded topical – Tricaine Blue – that has both lido and prilocaine but at 10%. There must be some difference in EMLA that I don't understand.

TAC is lidocaine 20%, tetracaine 4%, phenylephrine 2%. It's got the extra benefit of vasoconstriction because of the phenylephrine.

Andy, here is the breakdown of TAC 20% versus Tri-Caine PE (aka Profound):
Tac 20% gel is a concentration of:
Tetracaine 4%, Lidocaine 20%, and Phenylephrine 2% in an aqueous gel base. It is sold by Professional Arts Pharmacy in an 18ml pump for $40.00. Essentially, you will be paying $2.22 per ml. Each recommended dose is 0.3ml so the 18ml bottle will give you 60 doses.

My formula is Tri-Cain PE gel, which is exactly the same as Profound PE (I had to rename it, because this name is already in use by another pharmacy) has the following concentration:
Tetracaine 4%, Lidocaine 10%, Prilocaine 10%, and Phenylephrine 2% in an aqueous gel base. I am currently pricing it at $65 for 30ml. Essentially, you will be paying $2.16 per ml. Each recommended dose is 0.1ml to .3ml so the 30ml bottle will give you 100 to 300 doses. The reason that you can potentially get more doses out this formula is because it is a more powerful formula, so you would need less of it.

This link will give you some information on the profound formula. [Editor's Note: Go to original message board on Orthotown.com to view link.] Personally, I think the Profound formula is a superior formula and you can get more bang for you bucks. However, if your colleagues still insist on using Tac 20% we can still compound that. We can certainly be competitive with the pricing at $35 per bottle of 18ml. Hope this helps clarify things.

I thought EMLA (eutectic mixture of local anesthetics) was the generic name for the compounded mix of local anesthetic topical gels. In that case, I'm actually using a Tricaine type gel (similar to Pround PE). See above what my Pharmacist sent me.

Andy, I seem to remember an oral surgeon telling me about EMLA 10 years ago. Said it was for skin application for those who are really phobic. Put it on, cover with a band aid, let
set 60 minutes and then you can start an IV on a tough patient. I think he said it could be used intra-orally but it really was not for that purpose. Are you saying some are using it intra orally?

I wonder why since 20% TAC would seem to serve that purpose. Maybe the EMLA is FDA approved and they like that imprimatur. If it is not for intra-oral use, the FDA approval doesn’t count, I would think. It becomes an off brand use.

For whatever it is worth:

1. For palatal use, I use the 20% TAC followed by about a 10th of a carpule of lidocaine
2. For buccal use, regular topical unless the patient is really nervous and then 20% TAC.
   
   Either way it is followed by 1/2 carpule of lidocaine.
3. I’ve heard the 20% TAC can cause tissue sloughing but that has never happened to me. It is the reason though that I prefer regular topical if I can on the buccal. Why take a chance? On the palate, I’ve never heard of tissue sloughing being an issue.

I’ve placed a lot of screws using the above technique with few if any problems.

Anecdote: had an adult and I was placing a TAD between the UL23 to help correct the midline. Great but nervous patient. Gave her the lidocaine and got half of the screw in and she is really uncomfortable. Gave her some more. Still uncomfortable. More lidocaine. Took a film. Nowhere near any structure. Go really, really slowly and finally it is in but she is uncomfortable. I tell her she’ll be fine by the time she gets home. Everyone is. It is a no big deal thing. That was late Thursday when I used to put screws in after hours. Friday was a fishing day so I am up at 3:30 AM making sandwiches when my pager goes off. I think aaaaah what now because I see it is her on the voice mail. Check the voice mail: “Dr. Ruff. Just wanted to let you know that you were right. I was fine as soon as I got home.”

Charlie, from what I understand, EMLA has been sold on and off by dental suppliers for years. People start to like it, it gets pulled from the supply shelves or someone and then they get it from someplace else. Here’s a blurb that may shed a little more light:

“EMLA (eutectic mixture of local anesthetics) is a combination of lidocaine and prilocaine. Generally, it is given in liquid form. Until recently, EMLA was approved only for numbing intact skin. It was not used inside the mouth. This is because EMLA reaches the bloodstream rapidly if applied in the mouth.

In 2004, the U.S. Food and Drug Administration (FDA) approved an EMLA product called Oraqix. Oraqix is a gel that can be inserted under the gums and into the space between the teeth and gums. The gel numbs the gums within 30 seconds and lasts for about 20 minutes. It is only designed to numb soft tissue. It will not numb teeth. For this reason, Oraqix may be useful during deep cleaning procedures such as scaling and root planing. Scaling and root planing involves cleaning the teeth above and below the gum line and smoothing the surfaces of the teeth.”

BTW, I enjoyed the pager story!

[Posted: December 7, 2011]

Peter, interesting. He’s making tri-caine blue and adding the vasoconstrictor, too. I’ve heard great things about all compounded topicals. What’s the shelf life? Sometimes I don’t use all of my tac before it expires. Getting 50 percent with the same shelf life is a selling point... kinda. Now if it lasts three months longer with the same potency, there’s a great reason to celebrate.

Andy

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