

Why the shot didn't work...

Occasionally, I'll get a comment or question about past articles I've written. The subject of last week's article (shots or dental anesthesia) seemed to generate a bit more interest than usual. I received several inquiries that I'd like to summarize and reply to as a whole. Names have been changed to protect the innocent.

Who knew dental injections were so exciting?

Dear Dr. Parrish (the balding, not as attractive one),

I read your last article about shots with keen interest. I have had many bad experiences in the dental office. It seems like no dentist can get my teeth to go numb. Last time I was in, my doctor had to give me several rounds of shots to make my tooth go to sleep. Is this normal?

Sincerely,

Hill Country Pin Cushion

There are quite a few normal reasons that dental anesthesia fails to "take" the first time injections are given. Without knowing the procedure or teeth worked on, here's what may have caused the need for another round of anesthetic.

Anatomy – It goes without saying that we are all wired a bit differently. For anesthetic to knock out a nerve, the anesthetic must saturate the tissue space around the nerve. Unfortunately, nerve fibers sometimes do not read anatomy textbooks and the typical injection site may not reach the intended nerve. Some of us are also blessed with accessory or secondary nerves that relay pain along a different pathway than normal, thus necessitating an injection at a different site.

Mandibular Teeth – The bottom teeth are generally more difficult to numb than the top. Some studies show that mandibular (bottom) nerve blocks fail as much as twenty-five percent of the time. See the above anatomy section for reasons this is true.

Hot Teeth – Dentists sometimes refer to a tooth with severe pain as "hot." People who are in extreme pain generally have a hard time getting numb for any medical procedure. This has to do with the way nerves conduct signals to the brain. Without getting into boring details, nerves can become hypersensitive and need more time for the numbing to work, more anesthetic, or both.

Infection – Some more boring science here. Anesthetic has to be acidic to diffuse or enter into nerve fibers and block them from relaying pain signals. Large infections can neutralize the anesthetic and not allow it to enter the nerve and do its job. This is why it is sometimes prudent to start a round of antibiotics before treating a specific tooth.

Psychology – If you think it is going to hurt, it is probably going to hurt. Dental anesthetic knocks out pain fibers, but pressure and sometimes hot and cold nerves still work. Our brains can interpret pressure and temperature as pain if we are anxious, therefore, pressure or temperature hurt. There's no shame in postponing an appointment to another day and taking medicine for anxiety if your treatment is not one hundred percent comfortable.

Pincushion, I hope this helps. Until next week, keep smiling.

-Comments can be sent to www.ParrishDental.com