Xylocaine Nerve Restart (Block) of One or More Nerves of the Scalp is a Specific and Ideal Treatment of Most Severe and Chronic Tension Type Headaches

Opinion

After reading the latest articles on Tension Headache published by famous medical institutes, one can conclude that all treatment modalities are just trials and none of those can be a specific treatment, except occipital nerve block, which can be specific for occipital tension type headache.

Xylocaine (one of the local anesthetic drugs) can be one of the most effective drugs in treatment of tension headache by blocking one or more of the sixth sensory nerves of the scalp, namely:

1. Supraorbital nerve.
2. Supratrochlear nerve (terminal branches of the ophthalmic nerve).
3. Zygomaticotemporal nerve (branch of maxillary nerve).
4. Auricholo temporal nerve (branch of mandibular nerve).
5. Greater occipital nerve (dorsal rami of C2 nerve root).

The excellent therapeutic effect is reflected by long lasting and complete pain relief of xylocaine alone or preferably in combination with methyl prednisolone (Depo-Medrol) in more than 100 cases of chronic tension headache. Which explains our belief regarding the pathophysiological mechanism of tension headache, which is an increased sensitivity of one or more of the sensory nerves of the scalp to noxious or even non-noxious stimuli, so the sensory nerve(s) become vulnerable to any stimulus which simply results in functional disturbances of the nerve(s) which leads to exaggerated response to triggering factors, such as: stress & cold.

In other words it is a reversible receptor transmission dysfunction of the sensory nerve(s) of the scalp that can be relieved by 1 ml of 1% xylocaine injection for supraorbital, zygomatico & auricolo temporal nerves, and 5 ml of 1% xylocaine for the greater & lesser occipital nerves in C2 transverse process.

The long lasting pain relief (permanent) obtained by xylocaine injection inspite of the short duration of action of xylocaine is maybe due to the block allowing the nerve to regain its normal activity. It’s simply like restarting any electronic device when it becomes dysfunctional, which after the restart goes back to normal.

Moreover, the effect of xylocaine block for tension headache is similar to its’ effect in cases of sympathetically maintained pain syndromes, such as Reflex Sympathetic Dystrophy (RSD) where undoubtedly sympathetic block is associated with high success rate as shown in many published studies, and also in our results in our interventional pain management clinic, these results made the sympathetic block(s) to be done as soon as possible whenever indicated as many authors suggest, and not be the last choice.

The positive and high success rate of these blocks of the sensory nerves of the scalp for tension headache is similar to sympathetic blocks, they differ from each other by number of blocks, for tension headache the long lasting results are obtained in 1 or 2 sessions, where sympathetic block needs to be repeated up to 10 times.

The same result can also be obtained from blocking the suprascapular nerve, the most common cause of shoulder pain, as it enervates the supraspinatus muscle and gleno-humeral joint.

I consider that xylocaine (golden drug) can be the drug of choice in many clinical situations regarding pain relief and stopping many unwanted clinical events resulting from the nerve dysfunction whether sympathetic or somatic, if used for the right patient on the right site, where the skill of the attendant plays a major role in the results.

I suggest that the term nerve restart is more suitable when using xylocaine as a treatment for nerve dysfunction whether sympathetic or somatic, rather than nerve block which is for local anesthetic for surgery or post-operative pain relief.

Thank God for the discovery of Xylocaine by Nils Lofgren the Swedish Organic Chemistry Professor.