

## The mechanism of the approach.

Written by врач невролог А.А.Пономаренко  
Sunday, 29 April 2012 03:00

---

It is difficult to say what are the mechanisms of the recovery of regular nerve centers activity(at the cellular level). However, the fact is unquestionable that the effect exists and can be used successfully for treating diseases connected with high muscle tone and any other.

While thinking about the results, I had to suggest and reject lots of speculations about how this approach works. I am convinced that when we stimulate the muscle with the maximum possible pain, we send a powerful flow of impulses(hyperstimulation) decreasing the cells activity that control the tone of this muscle. The activity of those cells decreasing that are hyperactive and decreased till the regular level. Cells that have regular activity or decreased activity are almost not affected by this wave of impulses as they don't have the energy reserves which hyperstimulation "burn". That is why the use of hyperstimulation leads to positive results in a form of the disappearance of certain symptoms of the excess activity(pain, convulsions). It works for epilepsy and trigeminal neuralgia(when sensitive cores are damaged)when the high activity of certain cells is noticeable, for example.

The questions remains about how the hyperstimulation is able to increase the decreased functions if it turns on the processes of inhibition in nerve cells. The recovery of decreased functions until the regular state can be explained by the elimination of suppressive centers influence, that are hyperactive, on centers, that they control and connected with them by reciprocal relationship. The thing is that many nerve cells and centers are in so called reciprocal relations in order to provide the ability of self-regulation. Reciprocal relationship is when an increased activity of one object lead to the decrease of activity in another object and vice verse. In China such concept is illustrated in a well-known monad yin yang. Imbalance in the activity of nerve centers is in basis of various disorders in organs, systems and tissues. It is characterized by the complicated plexus of the results of excess and lack nerve centers activity and can be eliminated by the hyperstimulation of these centers through the reticular formation of the brain stem.

Of course, as I already said, hyperstimulation must lead to the decrease of any nerve cells activity not just of overexcited ones. Cells with the regular and decreased activity are also involved in a process of inhibition and lose their reserves, though there are less reserves and reserves recover faster. Different effects that prove it can be observed for some time. This time, as I noticed, takes about 3-4 weeks. Naturally, such processes of activity recovery happen also in cells that were overexcited and that got the main "impact" during this 3 weeks the new system of interaction between nerve centers is developed and settled. It can be called as new only in regard to the previous recent one. In fact, it is just the return to the "former order" that was before stress reprogramming.

I will repeat again that negative external stimuli lead to the occurrence of inbalance in interaction between nerve centers. The nervous system mobilize its reserves to react most adequately to the excessive external factors. If this powerful external stimuli repeat very often, they can promote holding the mobilized state of brain. Although even the occurring once stress may result in unbalance of nerve centers work. That is how the adaptive reaction may cause the

## The mechanism of the approach.

Written by врач невролог А.А.Пономаренко  
Sunday, 29 April 2012 03:00

---

pathological changes in the organism.

There is another question. Why do the powerful vegetative reactions are seen when the pain stimulation was made with analgine solution and at the same time pain shock doesn't seen? Undoubtedly, it happens because the area where the hyperstimulation is made is very small. In the places of injections incitation of all pain receptors happen. That is why the formed impulse is rather powerful but we can't be afraid of the shock occurrence since the area of stimulation is tiny. Nevertheless, vegetative reactions common for a shock can be seen but happen very rare and last for a few seconds so they aren't able to lead to dangerous consequences. I mean bradycardia up to hear stop and the decrease of arterial pressure. I will repeat once more. It is almost impossible to reach a level dangerous for the life when we use analgine solution for the procedure of hyperstimulation. At the same time, the level of stimulation is so high that it is able to cause processes leading to the decrease of pathologically high activity of nerve centers.

The muscles, our body mostly consist of, are controlled by the small brain area. To regain the regular tone under various diseases, injections have to be given in hypertonic muscles. It is not surprising, because such procedure was made by the doctors who used bees to cure radiculitis. The particular schemes and places to reach the best effect are described in articles dedicated to certain diseases, i.e. sciatica.

As I already said, trapezius muscle have a unique connection with cores of reticular formation. On the one hand, the reticular formation signalize about the disorders in certain brain centers by the tension of certain areas. On the other hand, we can use trapezius muscle as a launching ground for "bombing" the brain areas, which are in crisis, with pain impulses. These stimuli are spread through the accessory nerve in the brain stem and then to cortex and subcortex cores. This wave of impulses provide the reallocation of power and information interrelation between brain divisions. Undoubtedly, the effects of such reallocation of activity areas can be seen at the moment of stimulation. The most important thing is that this short "reboot" gives a start for the changes in the brain and the whole organism. During 3-4 week changes little by little subside and come to the balance. This provides the stable therapeutic effect of procedures. Thereby, we have body muscle to influence on the muscular system and trapezius muscles for an access to regulatory systems of the whole organism.

To sum up, I'd like to say that this approach of therapeutic influence is one of the alternative approaches in regard to classic acupuncture. The advantage of the acupuncture is the ability to regulate the intensity of the influence and selectivity. Although these advantages are reached for a great number of therapeutic sessions which actually provide the selectivity. In our case, the one powerful and undifferentiated therapeutic influence lead to broad and long-lasting changes in the organism. This, of course, excludes the possibility of selective approach but economize lots of time and results at the end are much better the acupuncture results.

**neurologist A.A.Ponomarenko**