



APPLICATION OF DENS TECHNOLOGY IN SPEECH CORRECTION OF CHILDREN WITH PSEUDOBULBAR DYSARTHRIA AGED 5-6 YEARS

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Every year there are more and more children who have impaired pronunciation of speech. Most often, sound pronunciation disorders occur in preschoolers aged 5-6 years, who have been diagnosed with “erased dysarthria.” Speech therapy, like all modern education, does not stand still, but is rapidly developing. Various forms and technologies appear in it that did not exist before, and old ones are also improved.

Modern speech therapy is looking for new ways to correct a child’s speech defects and create conditions for the learning and development of children of different age groups and different levels of development. Speech therapy technology is a set of various exercises, implemented in a certain sequence and aimed at eliminating or smoothing out various speech defects of a child [1].

Increasingly, speech therapists in their practice use psychogymnastics - a course of special classes (studies, games, exercises) aimed at developing and correcting various aspects of the child’s psyche. Elements of psychogymnastics in combination with speech motor exercises help solve pathological problems of the child, as well as the use of Dynamic electrical neurostimulation (DENS) technology in correcting the speech of children with pseudobulbar dysarthria aged 5-6 years. If you use these exercises on a regular basis, you can form correct speech breathing; develop general, fine and articulatory motor skills; to form phonemic hearing, as well as improve the rhythm and intonation of speech [3].

The use of Dens technology is also actively used in speech therapy today. O.V. Lazarenko believes that if Dens technologies are used to correct the speech of children with pseudobulbar dysarthria aged 5-6 years in speech therapy classes, then it is possible to effectively speed up the correction of impaired sounds in children who have reduced or impaired kinesthetic sensations, since the active palm significantly increases impulses, entering the brain’s cortex from the tongue [2]. Using this method improves children's attention, memory, speech, spatial representations, fine and gross motor skills, reduces fatigue and improves the ability of voluntary control.



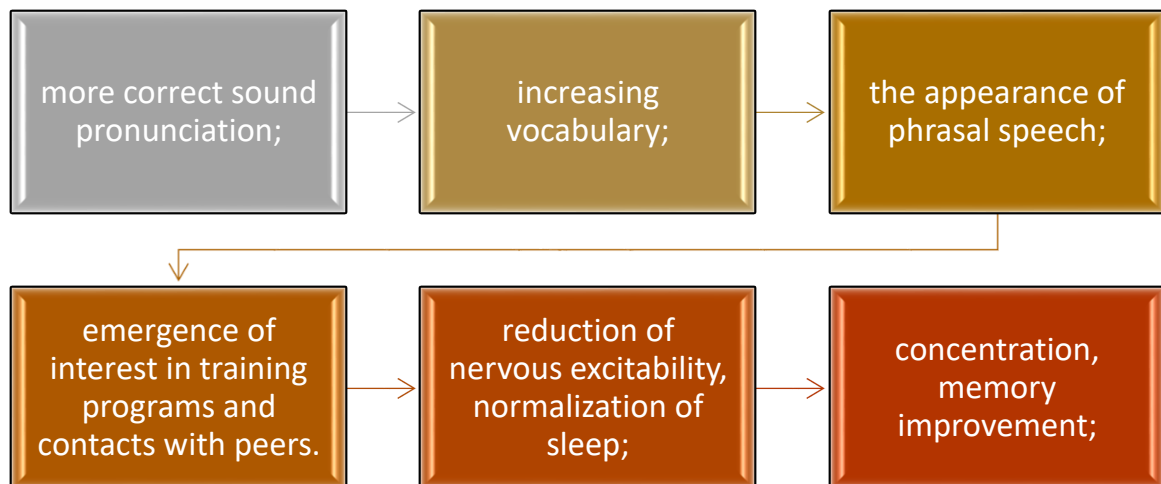


Su-Jok therapy is actively used today for speech therapy purposes. The relevance of using the Su-Jok therapy method in speech therapy correction of sound pronunciation in preschoolers lies in the fact that, while beneficially influencing the development of fine motor skills of the fingers, speech development occurs; Children's interest in classes increases, rapid fatigue and loss of interest in the process of automating sounds when simply pronouncing speech material is prevented. Su-Jok therapy helps to activate positive emotions and reduce negative manifestations [3]. Speech therapy massage does not lose its relevance. This is an active method of mechanical action, which is aimed at correcting various speech disorders.

One of the modern and quite effective techniques in pedagogy can be considered the technology of mnemonics, which helps in the development of visual and auditory memory, visual and auditory attention, and also speeds up and makes interesting the process of automation and differentiation of delivered sounds [2]. The essence of mnemonic schemes is that for each word or phrase a picture (image) is created. Thus, the entire text is sketched schematically. Looking at these drawing diagrams, a child with pseudobulbar dysarthria at the age of 5-6 years can easily reproduce textual information.

But despite everything, DENS therapy can still be considered one of the modern technologies used in speech therapy. This is an effect on nerve receptors and biologically active zones and points of the skin with weak impulse points. DENS in the practice of speech therapy reduces work time, makes production and automation of sounds easier, especially in children with dysarthria. This method is simple and effective. It allows you to specifically influence the affected areas of the articulatory organs, activating and restoring their activity. Normalization of sound pronunciation is faster in this case [2]. The practice of using DENS technology in speech therapy clearly demonstrates that after the first sessions the following results can be observed:





Several full courses using DENS allow speech therapists to overcome any, even very complex, problems and speech development disorders in children aged 5-6 years. DENS therapy methods are convenient, safe and do not cause allergic reactions.

In the process of treating speech development disorders, the impact is made on both specific speech zones and universal ones:

- ❖ Cervical-collar area: working with it can improve the supply of oxygen to the brain and relieve speech restrictions.
- ❖ Speech zones (the area under the jaw and tongue): stimulating them improves blood supply to the articulatory apparatus and prepares its muscles for active work.
- ❖ Su-Jok speech zones (on the pads of the fingers): working with them strengthens the connection between speech function and finger motor skills. These zones are located nearby in the cerebral cortex and mutually influence each other.
- ❖ Paravertebral zones (right and left of the spine): stimulation of them allows you to use the subcortical-stem structures for the benefit of treating speech disorders.

Children like DENS therapy technology, it resembles a game, but before the session it is recommended to show the child the device, talk about the “game”, demonstrate it on yourself in order to “make friends” with the device.

Contraindications are the presence of an implanted pacemaker, neoplasm, status epilepticus. These are cases when it is necessary to coordinate the use of the method with a doctor. Otherwise, the method is quite harmless. Dynamic electrical neurostimulation is used from infancy (there are no age restrictions).



Thus, we reviewed speech therapy technologies that are relevant today. Based on the above, we can conclude: in order to interest children, make the learning process conscious and more interesting, non-standard approaches and new innovative technologies are needed, therefore it is important to preserve both traditional and develop new areas of speech therapy theory and practice.

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