Verbal development dysontogenesis in children with velopharyngeal incompetency

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Children with velopharyngeal incompetency make up one of the most severe forms of speech pathology. Linguistic and psychological-pedagogical study of the defect suggests development of advanced correction methods. Interactions of articulation and receptive mechanisms in verbal activity are described.

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8. Vibrant /r/ is either missing or substituted by the second /l/ in strong breath.
9. Additional noise in nasalised sounds (hushing, nasalisation, hoarseness, laringeal on-glide, etc.)
10. Background nasalisation forms (as a result of high position of the tongue root and insufficient participation of the alveolar articulation)

Children having regular lessons with speech therapy teacher are sometimes characterized by hypercorrection phenomena, i.e. forward shift of articulation. E.g. /f/ (frontal doraz) is substituted by /v/ (labio-dental) without changing the manner of articulation.

Children with velopharyngeal incompetency resulting from cleft lip and palate (speech therapy diagnosis: rhinolalia) belong to one of the most severe forms of speech pathology. We undertook investigation of the defect structure in linguistics and psychological-pedagogical aspects in the framework of the system approach. This study showed that the children with two given disorders do not make up a homogeneous group. Most common characteristics of speech deficiency in this case are found in acquisition of phonetics which is developing in abnormal anatomic and physiological conditions.

Children with rhinolalia are characterized by changes in oral sensitivity in mouth cavity as well as impairments in conditions of phonation and involvement of nasal resonator. Besides regular nasalisation children with rhinolalia are characterised by some specifically coloured consonants (often velar ones) which result in effect of participation of pharyngeal resonator, pharyngealization, i.e. excessive articulation resulting from tension in the walls of pharynx, appears as a compensatory means. There are also additional articulations in laring what furnishes the speech of rhinolalia as a specific "clicking on-glide.

Besides mentioned tendencies in adaptive changes of speech, there are found many more particular articulatory defects, latter depend greatly on positional changes in a word, phrase, text. The most typical are:

1. Omission of initial consonants
2. Neutralisation in the manner of production
3. Multiple various substitutions of sounds
4. Abrupt discontinuance of sounding (in the final position)
5. Pronunciation of hushing sounds is accompanied by strong noise and v.v.
6. Energetic sounds in the final position are surprisingly devalued
7. Manner of sound production is changed: explosives are substituted by fricatives

The described characteristics of phonetics in children with rhinolalia suggest the combination of such phonetic "uncertainty" of speech sounds and development of another acoustic traits.

Speech legibility varies from 28.4% to 55.5%. It brings around serious bounds of correct distinction and identification of language sounds, what proves disorder of the whole phonematic system. The degree of writing disorder is defined by combination of factors: defect of articulatory system, character and terms of speech therapy, compensatory capabilities of a child, influence of verbal environment. The children need specially organized correction in dysgraphs performed simultaneously with modification of child's phonological system. These data were taken into consideration of the reform in principles of organization of verbal material, used for correction goals.

Study in other aspects of verbal activity of children with rhinolalia of different age groups revealed a certain dynamics in interaction of pathogenic factors, differing in its nature, degree and turn of influence. In preverbal and early verbal period the greatest negative effect is produced by anatomic-physiologic disorders influencing development of phonetics (I stage). In the period of active development of verbal activity deficient conditions of speech generation, deprivation of motor component of speech trigger psychological factors. They cause diversity of deficiencies in speech generation and perception (II stage). On the III stage when the language system has to be acquired and organized without delay and is added which hinder communication and information exchange (education). Use of such a model supplies a speech therapist with data which means for defining correction strategy, the significance of the found secondary aftereffects of the defect.