JUVENILE CHARACTERISTICS OF THE HIGHER NERVOUS SYSTEM

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Abstract This article is about conditioned and unconditioned reflexes.Conditioned reflexes appear after birth. Unconditioned reflexes are called innate reflexes or a person is born with these reflexes. Unconditioned reflexes are the response of the body to external and internal influences through the nervous system. Simple and complex unconditioned reflexes are distinguished. Normal unconditioned reflexes appear as a result of the activity of the spinal cord. complex unconditioned reflexes appear in the subcortical nodes of the brain stem and cerebral hemispheres. Thoughts and considerations about each reflex having its own reflex arc are described

Key words: Reflex, nutrition, protection, reflex, cough, excitation, inhibition, irradiation, generalization

ENTER

From the first day of the newborn child, depending on the adequacy of conditional and unconditional influencers, the conditioned reflexes of the effort to eat begin to form. It is possible to create conditioned reflexes by affecting the skin's tactile sensations as soon as the child is one day old. If the child is kept in hand-feeding position at the age of 10-14 days, the child will develop a reaction to feeding. He turns his head, opens his mouth, then makes thrusting movements. This reflex is considered a conditioned reflex related to the time of breastfeeding.

Natural conditioned reflexes begin to form in the first days of the child. It is possible to develop negative conditioned reflexes to feeding in a child from the age of 4 months. From the age of 7-9 weeks, it is possible to form a conditioned reflex to eat in relation to light or sound.

Unconditional reflexes begin to form in a child from the moment of birth. Irradiation of excitation in the baby's nervous system is faster than that of an adult. As soon as the baby starts to drink mother's milk, coordinated movements appear in it.

During the sucking process, the child's body muscles, head and arms and legs move.

The following movement reflexes occur in newborn children. These include the tonic reflex of the muscles of the hand, the flexion reflex of the spine, and the pupillary reflex. All these reflexes are unconditioned reflexes.

As the age of the child increases, important movement reflexes (walking, running, etc., verbal-writing, speech movement reflexes, etc.) are formed.

LITERATURE ANALYSIS:

A saliva collection device developed by A.A. Yushenko and Krasnogorskyi (1907) is used to form conditioned reflexes to the secretory function of the salivary glands in children. In 1916, the American physiologist KS Lashley developed a method of collecting saliva from the salivary gland under the ear.

Ivanov-Smolensky's method of strengthening with words is of particular importance in studying the dynamics of children's cerebral cortex, and especially in determining children's typological characteristics.

In kindergarten children, internal inhibition and its types become increasingly important (O.P. Kopustnik and V.K. Fadaeva, 1933. R.M. Pen, 1933).

At this young age of the child, delayed, trace conditioned reflexes are formed with difficulty in the cortex of the cerebral hemispheres.

According to the tests, the strength and mobility of nervous processes increases in a 5-year-old child, which makes it possible to change the dynamic stereotype in the child with some ease (E.N. Degtyar, 1957). In children of this age, the gagging reflex is stronger and it is getting stronger.

RESEARCH METHODOLOGY:

Forming a conditioned reflex to eating and other activities.

For the first time, the child develops conditioned reflexes to hearing, seeing, and gradually skin tactile sensations.

A two-month-old child turns his head in the direction of the sound and can hold his head for 1-1.5 minutes. In a 2-3-month-old child, the tone of flexor muscles is more than that of writing muscles. A child can hold his head from the age of two months. From the age of 4-5 months, he begins to perform coordinated actions to catch what he sees. A 5-month-old child can hold any object in his hand for 20-30 seconds and bring it to his mouth. From the age of 5-6 months, he can sit on his own and tries to stand up. From the age of 7 months, he sits independently and starts to stand up with the help of adults. At the age of 8 months, he leans on things, tries to hold things and walk. From the age of 9 months, he stands independently without any support, he can walk by holding one hand, and gradually he tries to walk independently. Effects of vision, hearing, and skin receptors along with proprioceptors are important in the formation of movement skills in children.

ANALYSIS AND RESULTS:

Method of testing conditioned reflexes in children. A newborn baby has feeding, protection, kicking, coughing and other unconditioned (innate) reflexes. These reflexes have an important biological significance in the child's life, on the basis of which conditioned reflexes are formed.

N.I. Kasatkin studied the formation of a conditioned reflex in one-month-old children in a special chamber with a length of 118 cm and a height of 75 cm. The conditional effects used in this are harmless to the child. A bed is built into the camera, and sensitive devices are placed on the mattress where the child is sleeping. The progress of the experiment and the condition of the child are monitored from the "eye" of the cabin.

Morning and afternoon hours are favorable conditions for conducting experiments. The duration of the experiment should not exceed 10 minutes with 10 repetitions.

In the food-reinforced experiment, the child is blindfolded, or the upper part of the face is covered with a white screen, so as not to see the hand movements. In the unconditioned reflex of eating, the child's sucking movements are taken as a conditioned effect. Milk or milk mixture is given to strengthen it. When forming a protective reflex, the reaction of closing the eyelids when air is sprayed into the child's eyes is taken into account.

SUMMARY

Types of higher nervous activity

In children aged 1.5-2 years, conditioned reflexes to single stimuli are quickly formed and strengthened. A temporal connection to two indifferent influencers is formed faster. At the age of 2.5 years, the child's higher nervous system is much improved. Simple and somewhat complex conditioned reflexes can quickly fade if not reinforced. There are individual differences in the formation of conditioned reflexes in children of kindergarten age, and these differences depend on the physiological and psychological development of the child's nervous system. The development of the higher nervous activity of 3-5-year-old children is fundamentally different from the development of the higher nervous activity of children at an earlier stage. At this age of children, the nature of the target reactions changes. The child tries to know various objects and events by asking "what is this?"

A 2-3-year-old child looks at objects and determines their shape by holding them. The child uses previously formed visual-kinesthetic connections, guesses the shape of objects. Nervous processes such as excitation, inhibition, irradiation, and generalization are stronger in the cortex of the cerebral hemispheres of a child of kindergarten age. The relationship between the external and internal inhibitions of a 5-year-old child changes.

According to the tests, the strength and mobility of nervous processes increases in a 5-year-old child, which makes it possible to change the dynamic stereotype in the child with some ease (E.N. Degtyar, 1957). In children of this age, the gagging reflex is stronger and it is getting stronger.

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