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## **HYPERACTIVITY IN CHILDREN AND ADOLESCENTS - PREVENTION AND TREATMENT WITHOUT USE OF DRUGS AND PSYCHOTHERAPY**

**The summary in English.** On the basis of practical research, recommendations for parents and doctors on the prevention and treatment of childhood and adolescent hyperactivity (not caused by genetics) without the use of drugs, vitamins, diets, hard regimen of day, psychotherapy and other things are given.

*Keywords: hyperactivity, prevention, treatment, children, adolescents, computer*

### **Purpose of the study**

Determine methods to prevent and treat genetically not conditioned hyperactivity in children and adolescents without the use of drugs, vitamins, diets and others.

### **Main part**

#### *Initial data*

Children's hyperactivity, or attention deficit hyperactivity disorder, is manifested by inattentiveness, distraction, mobility, increased activity, impulsivity in social behavior and intellectual activity unusual for a normal child [1].

The level of intellectual development of hyperactive children is normal. Hyperactivity manifests itself both in preschool and school age; moreover, among boys, hyperactivity occurs 4-9 times more often than among girls [1].

Hyperactivity is treated with medications and psychological and pedagogical work [1].

#### ***Hyperactivity properties important for further analysis***

1. Hyperactivity often goes away by itself by adulthood [4, p. 44].
2. The brain of hyperactive children works cyclically: after 5-15 minutes of work, the child gets tired and needs rest for 3-7 minutes [4, p. 44-45].
3. Revealed a direct dependence between computer use and hyperactivity [3, 23].

#### ***Hyperactivity Analysis***

It is known that in children the processes of arousal prevail over the processes of inhibition [2, p. 18]. Excessive excitatory load on the children's nervous system leads to the fact that the child becomes more capricious, restless, less controllable, eats worse, and also his performance decreases [2, p. 21].

It has been established that hyperactivity develops due to computer games, setting up computer programs, watching movies on a computer and using the Internet. But hyperactivity does not develop when programming and working with texts on a computer [3, p. 22], and is also not formed when watching TV [5, p. 915].

As you can see, ***hyperactivity develops due to too much time spent on computer entertainment, but hyperactivity does not develop when a child or teenager purposefully works at a computer.***

While using the computer, the child is limited in physical activity, while the load on his nervous system is quite large. In order to compensate for the deficit in motor activity that has arisen due to a prolonged stay at the computer, the child is forced to intensify his motor reactions, which, from the outside, looks like excessive everyday physical activity: lack of perseverance, cannot sit still, runs too much, excessively sociable [5, p. 916].

Thus, it is distinguish between the causes of hyperactivity from the consequences.

#### **Causes of hyperactivity:**

1. Excessively large amount of time that the child spends on computer entertainment.
2. Lack of physical activity in the child.

In fact, ***hyperactivity is a variety of reaction of the nervous system of a young organism to a specific stress.***

#### **Consequences of hyperactivity:**

1. The child's desire to compensate for the lack of physical activity with accelerated and complicated performance of ordinary everyday movements.
2. Due to the overload of the nervous system, the child quickly gets tired, so he cannot perform ordinary tasks that require concentration of attention without frequent rest breaks.
3. Computer entertainment, especially games, is characterized by a high rate of change in the virtual visual image, much faster than it happens in the real world. Having become accustomed to such a high rate of change in the computer world, the child transfers it to the real world, as a result of which the behavior of the young person becomes impulsive.
4. Boys more than girls spend time at the computer in general; in addition, boys play more and tune computers, and girls draw more and work with texts [3, p. 20], therefore, the nervous system in male children and adolescents experiences heavy load than the nervous system

in female children and adolescents, due to which hyperactivity is mainly suffered by boys and young men.

Based on these data, it is possible to give a definition of acquired hyperactivity, which must be distinguished from congenital or genetically determined hyperactivity.

**Acquired hyperactivity in children and adolescents is a reaction of an unequal system to stress caused by an excessive amount of time spent on computer entertainment and an insufficient amount of time devoted to physical activity, as a result of which the child becomes inattentive, impulsive and exhibits excessive physical activity in everyday life.**

Now that the causes of hyperactivity have been identified, recommendations can be made to eliminate its causes.

### *Warning and treatment of acquired hyperactivity*

**The main principle on which the warning and treatment of hyperactivity should be based is to reduce the amount of time the child spends playing with the computer.**

Effective means of warning and combating hyperactivity for children and adolescents:

1. Reducing the time the child spends on computer entertainment.
2. Increase in the time the child spends outdoors, playing at home, as well as at work.
3. An increase in the time spent by the child reading books (printed or electronic).

Ineffective measures of struggle from hyperactivity (which address aimed at fighting off effects of certain stress, not with its causes) in particular is:

1. The use of medical drug.
2. Application of diets.
3. Change in parenting behavior.
4. Establishing a tough daily routine.
5. The use of psychotherapy.

As you can see, *the intervention of a doctor for the treatment of acquired hyperactivity is not at all necessary - parents can and should solve this problem on their own.*

### **Recommendations for parents:**

1. If a child was purchased a tablet (smartphone), then he needs to buy and an e-book.

If parents want to buy a tablet or smartphone for their child, then they should also purchase and an e-book. An e-book is an inexpensive (relative to a tablet or smartphone) portable mini-computer with a black-and-white screen that is safe for sight and intended for reading books. One e-book can contain thousands of works, among which a child has the opportunity to find something that will be interesting for him at a given moment in time - this is an important property of an e-book, since few families own a library with thousands of printed

books. Reading is beneficial and does not induce hyperactivity, so by alternating e-book reading and computer entertainment, parents can reduce the amount of time their child spends playing with the computer.

2. After dinner, the child should not have fun with the computer.

Evening is a time to get ready for bed, not a time for active games.

In the evening, the child should do quiet things [2, p. 19-20].

3. Urban children should do more physical education.

Urban children, in comparison with their rural peers, have fewer opportunities for everyday physical activity: there is no garden or vegetable garden in the city; in addition, the city does not keep cows, chickens and other animals. The everyday activity of an urban child is limited to walks and simple help around the house, therefore, extracurricular activities in sports sections, as well as attending physical education lessons at school are important for the child's physical development.

#### **Conclusions:**

1. Hyperactivity (not genetically determined) is a consequence of the excessive entertainment of children at computers.

2. Warning and treatment of hyperactivity without the use of drugs can be described as follows: play less at the computer, move more and read more.

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