"JOURNAL OF SCIENCE-INNOVATIVE RESEARCH IN UZBEKISTAN" JURNALI
VOLUME 1, ISSUE 6, 2023. SEPTEMBER
ResearchBib Impact Factor: 8.654/2023 ISSN 2992-8869

BASIC PATHOLOGY OF CHILDREN'S BRAIN

Umarova Saboxon Minavvarovna – senior teacher at KSPI, Uzbekistan.
Boltaboyeva Durdona Bahritdin qizi - Student at KSPI, Uzbekistan.

Abstract

This article provides information about the types of brain diseases in children, their characteristics, methods of treatment and prevention.

Key words: hydrocephalus; microcephaly, encephalopathy, anencephaly, cancer, cerebrospinal fluid, aqueductoplasty, venticulocisternoscopy, septostomy.

Causes of brain diseases. In order to prevent any disease, it is important to first know its causes. Depending on the type of brain diseases, the causes of their origin are also different.

The term hydrocephalus is derived from the Greek words hydrosistem meaning water and mullet meaning head. It means that the cerebrospinal fluid (cerebral fluid) in the brain has increased too much. As a rule, it shows the presence of dilatation in some parts of the ventricular system and the increase of intracerebral fluid. Under-stand mechanisms leading to hydrocephalus are essential to understanding the underlying ventricular system in the brain. The ventricular system consists of four porous spaces (i.e. ventricles), which are connected to each other by channels (i.e. oblong). Cerebrospinal fluid is a clear liquid that is a vascular tissue located in the ventricles. Cerebrospinal fluid has several functions.[1] Including softening the brain and protecting it from shock. It supplies it with nutrients and controls the general movement of the central nervous system, eliminates production waste and supplies biochemicals. Hydrocephalus can be congenital or acquired, while medical conditions that occur at various stages of development can also cause hydrocephalus. Thus, hydrocephalus itself is not considered a specific entity of the disease. Symptoms of the disease:

• Excessive changes in intracerebral fluid, secondary symptoms of increased intracerebral pressure

[1] M.S. Abdullaxo'jayeva patologik anatomiya I qism . «tafakkur- bo'stoni» toshkent – 2012

• Age depends on the causes of the disease. Infants have different intracerebral fluid pressures than adults, and the sutures connecting the bones of the brain are not yet closed and can expand to accommodate the growing cerebrospinal fluid.

• Thus, the common symptoms of hydrocephalus in children are abnormally large head size and unusual growth of the head. Another symptom is drowsiness, nervousness, notes and demonization. In older children, headache, nausea, recording, enlargement of the optic disc, blurred vision, diplopia (double vision). Disturbance of balance, incompatibility of movement and walking, urinary incontinence, and relaxation are often observed. In addition, there may be personal and cognitive changes.

Endoscopic treatment of hydrocephalus. Currently, endoscopic treatment of hydrocephalus is an effective method in world neurosurgical practice. Types of hydrocephalus endoscopic treatment methods[2]:

• Endoscopic venticulocisternostomy of the III ventricle;
• Aqueductoplasty;
• Venticulocisternoscopy;
• Septostomy;
• Removal of tumors under the ventricles of the brain by endoscopy;

Other methods of *treatment* are not yet considered to be effective in surgery.

One of the main risks is infection at the location of the shunt. In children, the shunt due to infection requires revision, disconnection or fusion. Almost 2/3 of the Swedish studies required a small amount of one additional treatment.

Factors affecting neuropsychological results.

Hydrocephalus causes diffuse damage to both the cerebral cortex and the hypothalamus. The occiput, located behind the lateral ventricles, can expand faster than other parts of the system. This leads to brain compression. The gray matter of the brain consists of nerve cells of the body. The white matter consists of myelinated axon neurons and helps to transmit impulses between neurons.

The white matter examination tool determines the compression of the white matter tract in the brain in acute hydrocephalus. According to foreign literature, many children with hydrocephalus also have congenital forms of the disease. For example, myelomeningocele, a fracture of the spine. Most children with

[2] Abdullaxodjaeva M. S, P olyakova G. A. Patologiya peresadki pochki. — Tashkent: Meditsina, 1988

hydrocephalus score in the average range on a standardized test. Children with hydrocephalus have well-developed verbal rather than non-verbal thinking skills. Diffuse deficiency of the white matter mentioned above is related to the function of the effector addition of the spinal cord. According to Fletcher and colleagues, hydrocephalus is correctly classified in half of the cases listed above. Children with hydrocephalus have poor understanding of written and spoken speech[3]. Thus, it is possible to express the basic vocabulary and reading skills in children with hydrocephalus. Oral and written communication may be below average. Other neuropsychological functions have also been studied, including memory, attention and speed of information processing. Memory speed is slow.

Patients suffering from hydrocephalus have an inability to concentrate. Attention deficit disorder occurs more than 30% in children with spina bifida and hydrocephalus. Children with hydrocephalus have difficulty solving problems and forming concepts. They face difficulty in mastering subjects such as arithmetic and mathematics. Although such children do not belong to the mentally retarded group, they have some problems in their behavior, but no specific mental changes have been detected in them.

Hydrocephalus is observed in children with many spinal fractures. It should be said that these children have physical problems, as well as weakness or paralysis, urinary incontinence. It is recommended that such children undergo regular medical examinations and seek medical help when symptoms of the disease are detected.

Encephalopathy (Greek: "eukefalos" - brain, "pathos" - disease or suffering) is the general name for diseases of the brain that occur without inflammation (except for encephalitis). Encephalopathy can be congenital or acquired. In encephalopathy, dystrophic changes of brain tissues occur[4].

The main causes of encephalopathy:

• Brain injuries (post-traumatic encephalopathy);

• Pregnancy pathology;

• Atherosclerosis, hypertensive disease, dyscirculation;

•Intoxications by alcohol, heavy metals, drugs and poisons (toxic encephalopathy);

[3] Abdullaxodjaeva M. S. Sovremennыe predstavleniya o patogeneze sepsisa i sindrome vospalitelьnoy reaktsii. - Pyediatriya № 1, s. 124-128.

[4] A. P. Vvedenie v geograficheskuyu patologiyu . — M. : Meditsina, 1987. Avtsыn

• Drug addiction;
• Ischemia (chronic lack of oxygen to the brain);
• Diabetes.

Common symptoms of encephalopathy include:
• Loss of memory and consciousness;
• Headache;
• Dizziness;
• Depressions.

Patients suffering from such symptoms of encephalopathy mainly suffer from weakness, irritability, restlessness, and insomnia.

Types of encephalopathy:
• Gaye-Wernicke syndrome;
• Hashimoto's encephalopathy;
• Subcortical atherosclerotic encephalopathy;
• Reye's syndrome;
• Toxic encephalopathy;
• Kreitfeldt – Jakob disease.

The duration of *treatment* of encephalopathy is determined by the type of disease. Treatment is carried out in outpatient or inpatient conditions. Treatment methods for encephalopathy include:
• Medicines - treatment with medicines (hormones);
• Blockades - injection of drugs into the cavity of the canals;
• Osteopathy;
• Physiological procedures;
• Therapeutic gymnastics;
• Treatment with needles - reflexotherapy;
• Surgical procedure.

Anencephaly (Greek: "au" - no, "eukefalos" - brain) is a partial or complete loss of the large hemispheres and soft tissues of the brain as a result of the underdevelopment of the fetus in the mother's womb[5]. This disease occurs as a result of infectious diseases, toxic substances, alcohol, harmful effects of the external environment. In this disease, as a result of retardation of the development of the fetus

[5] A. P. , Javoronkov A. A. , Puui M. A. , Strochkova L. S. Mikroelementы . — M . -.Meditsina, 1991

in the mother's womb, when it is 21-28 days old, there is a violation of the development of neural tubes. As a result of this disease, 50% of fetuses die in the mother's womb. The remaining 50% of babies are born alive, and 66% of babies can live for a few hours or up to a week. The longest-lived anencephalus is Stephanie Keane, better known as Baby Key. He lived with this diagnosis for 2 years and 174 days. When symptoms of anencephalitis appear, pregnancy should be terminated regardless of its duration. Anencephaly occurs in 1 in 10,000 babies. This disease mainly affects girls and babies.

Diseases of the brain acquired children[6]:

• Specific and non-specific inflammations;
• Diseases that occur after injuries;
• Meningitis: tuberculosis meningitis and infectious meningitis;
• Tumors and various other diseases are included.

Meningitis (Greek. "menuie" - brain shell and Latin. "itis" - inflammation) is an inflammatory disease of the brain and spinal cord. Inflammation of the soft and reticular membrane - leptomeningitis and inflammation of the hard membrane - pachymeningitis are distinguished. Meningitis can develop both as a separate disease and as a complication of a disease. Headaches, changes in relation to light (photophobia), and in children there is a lot of sleep and fatigue. If meningitis is not treated in time, it can lead to complications such as deafness, epilepsy, hydrocephalus, mental retardation in children.

In many congenital and life-acquired types of cerebral palsy, failure to prevent the disease and not to treat it to the end can lead to children's disability, so women should take care of themselves during pregnancy as much as possible not to get infected with infectious viral diseases and take preventive measures. we recommend them.

[6] Davыdovskiy I. V. Obщaya patologi ya cheloveka. — M .: Meditsina, 1995.

REFERENCES:

1. M.S. Abdullaxo‘jayeva patologik anatomiya I qism . «tafakkur- bo‘stoni» toshkent – 2012
2. Abdullaxodjaeva M. S, P olyakova G. A. Patologiya peresadki pochki. — Tashkent: Meditsina, 1988.
3. Abdullaxodjaeva M. S. Sovremennыe predstavleniya o patogeneze sepsisa i sindrome vospalitelьnoy reaktsii. - Pyediatriya № 1, s. 124-128.
4. A. P. Vvedenie v geograficheskuyu patologiyu . — M. : Meditsina, 1987. Avtsыn
5. A. P. , J avoronkov A. A. , Puui M. A. , Strochkova L. S. Mikroelementi. — M . -.Meditsina, 1991.
6. Davыdovskiy I. V. Obщaya patologi ya cheloveka. — M .: Meditsina, 1995.