ISSN: 2582-4686 SJIF 2021-3.261,SJIF 2022-2.889,
2023-5.384 ResearchBib IF: 8.848 / 2024

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-4, ISSUE-11

DIAGNOSIS OF HYPERTENSION DISEASE IN CHILDREN

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Abstract: Hypertension, or high blood pressure, in children was previously considered a rare condition, but with obesity and lifestyle changes among children and adolescents, the problem is becoming more widespread. This article highlights the important aspects of diagnosing hypertension in children.

Keywords: hypertension, diagnosis, obesity and lifestyle, family history and genetic predisposition Causes of hypertension in children Primary (essential) hypertension: It is more common in adolescence and its main causes include obesity, low physical activity, improper There are things like diet and genetics.

Introduction:

Hypertension, or high blood pressure, in children was previously considered a rare condition, but with obesity and lifestyle changes among children and adolescents, the problem is becoming more common. This article highlights the important aspects of diagnosing hypertension in children. Causes of hypertension in children Primary (essential) hypertension: This is more common during adolescence and its main causes include obesity, low physical activity, poor diet, heredity. Secondary hypertension: This type is rare and mainly associated with serious causes such as kidney disease, endocrine system disorders, cardiovascular disease or tumor. Hypertension Risk Factors Obesity: Increasing body weight increases the risk of developing hypertension in children. Family history and genetic predisposition: A family history of hypertension or cardiovascular disease increases the risk of developing hypertension in a child. Low physical activity: Lack of physical activity is also an important factor that increases the risk of hypertension. Eating habits: Eating high amounts of salt, tending to fatty and high-calorie foods contribute to the development of hypertension. Psychological stress: Stress at school, unrest at home or others can cause high blood pressure in children. Blood pressure measurement method in children. Cuff selection: For children, smaller cuffs should be used. An adult-sized cuff may give inaccurate results. Correct measurement: The child should be at rest and the hand should be at the level of the heart during the measurement. Precautions during measurement: To get the correct result, it is important to measure blood pressure several times, rechecking at different times of the day. Criteria for determining hypertension Normal blood pressure: A child's blood pressure is considered normal if it is below the 90th percentile according to tables specially designed for age, sex, and height. Borderline blood pressure: Blood pressure in the 90-95th percentile is considered high. Hypertension: If a child's blood pressure rises above the 95th percentile, it can be confirmed as hypertension. Several measurements are required for accuracy. Laboratory tests Blood tests: Important in determining the cause of hypertension, they measure electrolytes, glucose, lipid profile and hormone levels. Urinalysis: Monitoring changes in urine is important to check for kidney disease. Kidney function test: Kidney disease can be one of the causes of hypertension, so it is necessary to check the kidney function. Visual diagnostic methods Ultrasound examination: Helps to determine the state of the kidneys and heart. Through this method, it is possible to determine the state of blood vessels and anomalies of the kidney. Cardiac examination (ECG and

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ECHO): Performed to assess heart function, detect heart attacks and other complications caused by hypertension. Radiological examinations: In some cases, examinations such as MRI and CT are used for more extensive diagnosis. Differential diagnosis When hypertension is detected, it is important to determine whether it is primary or secondary. In this case, the following diagnostic approaches are important: Identifying the main diseases: Identifying whether there are diseases of the kidney or endocrine system. Cardiovascular tests: These tests can help detect other conditions that can cause hypertension. Hormone levels and severity: It is important to evaluate endocrine system changes that may increase blood pressure. Treatment based on lifestyle changes. Proper nutrition: A diet rich in vegetables and fruits is recommended to reduce salt. Physical activity: Moderate physical activity is recommended at least 3-5 days a week. Stress management: Taking steps to reduce stress in children, including increasing play and relaxation time, is beneficial. Drug treatment If lifestyle changes are ineffective and the risk of hypertension is high, safe antihypertensive drugs for children may be recommended. But these drugs should be used only under the supervision of a doctor. Long-term follow-up and prevention Regular follow-up is important to control hypertension in children and prevent adverse consequences. In this case, it is necessary not to change the blood pressure, necessary examinations and medical supervision. This is important for healthy and sustainable development. Early detection and treatment of hypertension in children can prevent cardiovascular diseases, kidney problems and other complications that may occur in the future. Therefore, it is important to maintain the general health of children by choosing the right methods of diagnosis and treatment. The clinic of hypertension in children, that is, the symptoms of the disease, can sometimes be more different than in adults and sometimes unclear. or hidden. The reason for this is that the symptoms of high blood pressure are less common in children or the symptoms are similar to other diseases. The following symptoms are more common in children's hypertension clinics: Headache: One of the symptoms of hypertension in children is headache, which is often worse in the evening or after activity. This symptom is also observed in adults and is one of the first signs of hypertension. Dizziness and nausea: These symptoms are especially common in adolescents and can be a complication of hypertension. Nausea and dizziness occur as a result of rapid changes or increases in blood pressure. Fatigue and decreased physical activity: Children may experience general fatigue as a result of increased blood pressure. They may have difficulty performing their usual physical activities or tire easily. . Impaired vision: Children with high blood pressure may experience vision problems, such as black dots or blurriness in front of the eyes. It occurs due to the effect of blood pressure on the eye vessels. Shortness of breath and heart rate changes: High blood pressure in children can cause shortness of breath or a fast heart rate. These symptoms indicate the effect of high pressure on the cardiovascular system, and as a result of hypertension, the load on the heart increases. Sleep disorders: Children with hypertension may also have symptoms such as difficulty falling asleep or frequent awakenings. Such sleep disorders are also one of the current symptoms of hypertension. Since hypertension in children is often hidden and without obvious symptoms, it is important to detect them in time and undergo a medical examination if the above-mentioned clinical signs are present. At the same time, other diseases and factors that cause hypertension in children should be taken into account, since hypertension can often be accompanied by other health problems. Secondary hypertension: This type is rare and is mostly associated with serious causes such as kidney disease, endocrine system disorders, cardiovascular disease, or tumors. Hypertension Risk Factors and Obesity: Increasing body weight increases the risk of developing

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Laboratory tests Blood tests: Important in determining the cause of hypertension, they measure electrolytes, glucose, lipid profile and hormone levels. Urinalysis: Monitoring changes in urine is important to check for kidney disease. Kidney function test: Kidney disease can be one of the causes of hypertension, so it is necessary to check the kidney function. Visual diagnostic methods Ultrasound examination: Helps to determine the state of the kidneys and heart. Through this method, it is possible to determine the state of blood vessels and anomalies of the kidney. Cardiac examination (ECG and ECHO): Performed to evaluate heart function, detect heart attacks and other complications due to hypertension. Radiological tests: In some cases, tests such as MRI and CT are used for a more comprehensive diagnosis. Differential diagnosis When hypertension is detected, it is important to determine whether it is primary or secondary. In this case, the following diagnostic approaches are important: Identifying the main diseases: Identifying whether there are diseases of the kidney or endocrine system. Cardiovascular tests: These tests can help detect other conditions that can cause hypertension. Hormone levels and severity: It is important to evaluate endocrine system changes that may increase blood pressure. Treatment based on lifestyle changes. Proper nutrition: A diet rich in vegetables and fruits is recommended to reduce salt. Physical activity: Moderate physical activity is recommended at least 3-5 days a week. Stress management: Taking steps to reduce stress in children, including increasing play and relaxation time, is beneficial. Drug treatment If lifestyle changes are ineffective and the risk of hypertension is high, safe antihypertensive drugs for children may be recommended. But these drugs should be used only under the supervision of a doctor. Long-term monitoring and prevention Regular monitoring is important to control hypertension in children and prevent negative consequences. In this case, it is necessary not to change the blood pressure, necessary examinations and medical supervision. This is important for healthy and sustainable development

Conclusion: Early detection and treatment of hypertension in children can prevent cardiovascular diseases, kidney problems and other complications that may occur in the future. Therefore, it is important to maintain the general health of children by choosing the right ways of diagnosis and treatment.

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