

## ANALYSIS OF THE PREVALENCE OF JUVENILE ARTHRITIS

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**Abstract.** In the article the question about the prevalence of juvenile idiopathic arthritis in children in Russia and foreign countries. Conducted epidemiological analysis of not only the prevalence, but also the structure of juvenile arthritis in the Samara region for 2013-2015. It is established that in the Samara region, the figure is on par with Russia, and one of the forms of juvenile arthritis oligoarthritis pre-emption, which is more common in children under the age of six years, predominantly in girls.

**Key words:** juvenile arthritis, prevalence, rheumatology, children's.

Inflammatory diseases of the joints in children are frequently discussed in Pediatrics. Currently among the chronic rheumatologic disease in children and adolescents is widely distributed juvenile idiopathic arthritis (JIA). Typically, juvenile arthritis often lead to disability in children, worsen the quality of life of the child and his parents [1,2].

Worldwide incidence and prevalence of chronic arthritis in children has not been studied. Epidemiological studies show significant differences in different regions of the world with low levels in Asian populations and a relatively high level in Europe [3,5]. So, considering all subtypes of arthritis, the incidence in Japan ranges of 0.83 per 100,000 children to 23 per 100,000 in Norway [4,7]. There is a General trend that the number is growing. In Taiwan, the prevalence varies considerably, from 3.8 per 100 000 children in Australia to 400 per 100,000 population in the UK is about 1 per 1000 people [6,8].

Most likely, the large scatter of the data is associated with the distinction between clinical and epidemiological studies in relation to the inconsistent use of nomenclature, differences and difficulties of accurate diagnosis, and diagnosis at a later date in connection with the inability of patients to receive medical care. In addition, an important factor is the shortage of specialists worldwide, including pediatric rheumatologists [9].

It is known that the incidence of JIA is between 2 to 16 per 100 thousand child population in the age of 16. On the territory of the Russian Federation the prevalence of JIA in children under 18 years of age, 62.3 [1]

JIA is the main term describing the group of diseases which is characterized by arthritis which remains at least within 6 weeks and the beginning aged till 16 years and not having other obvious reasons [2].

According to the International League of rheumatological associations (ILAR, 2001), JIA it is sectioned into seven subtypes: systemic, an oligoarthritis (persistent and extended), a polyarthritis

of the Russian Federation – positive, a polyarthritis of the Russian Federation – negative; psoriasis arthritis; entezit, bound to arthritis; undifferentiated [5,7].

The patients having juvenile arthritises have numerous problems – a low level of quality of life, restriction of physical activity, daily activity, psychoemotional reaction. Juvenile arthritises are a medico-social problem for many countries of the world including for our country.

In Russia epidemiological researches on the basis of modern classification approaches, especially in regions, are carried out insufficiently. In this regard the assessment of prevalence and structure of juvenile arthritises in the Samara region for 2013-2015 was carried out.

In the course of the retro and prospektivny analysis 202 children with JIA, from them 65% of girls and 35% of boys aged from 0 till 16 years are examined.

At the time of including in the analysis the average duration of a disease at all children made 3,5 years and more.

The disease debut at children is the share a thicket of three, four, six and sixteen-year age.

The etiology of a juvenile pseudorheumatism remains low-studied so far. Most often, according to many authors, take part in development of JIA set of various factors of external environment. In the Samara region the following etiological factors are presented: in 46% - a trauma, 25% - the postponed infection, in 20% - a frigorism, to a lesser extent - the % becomes perceptible influence of a stress and inoculations.

Among all types of arthritises in the Samara region the oligoarthritis is registered in 41,6% of cases, polyarticular seronegative option – in 27,3%, undifferentiated arthritis – in 9,4%, systemic arthritis – in 8,9%, the arthritis bound with entezity - in 7,5%, polyarticular seropositive – in 2,0%, psoriasis arthritis – in 0,6% of cases.

When comparing of the obtained data with that, presented in domestic and foreign literature, it was noticed that the systemic option of arthritis and an oligoarthritis meets in the Samara region more often than abroad and less than across Russia, other options are widespread approximately equally. On a clinical current allocate several subtypes of polyarticular seronegative arthritis. In this research 1 subtype was taped at 53% of children. It is considered to be that to it azygomorphous arthritis at children of early age, treats with frequent development of a uveitis, identification of an antinuclear factor, prevailing at girls. In the Samara region at children the uveitis is found in 67%, an antinuclear factor at 59%.

Patients with a symmetric polyarthritis of large and fine joints, beginning at school age, with a negative antinuclear factor treat the 2nd subtype. In the Samara region 27% of the patients belonging to the 2nd subtype were taped.

3 subtype occurred at 20% of patients, and was characterized by a restraint in the affected joints, flexion contractures and normal indicators of an ESR. Thus in the Samara region 1 subtype of polyarticular seronegative arthritis prevails.

Depending on a type of joints most often were surprised: knee (63,6%), radiocarpal (7,7%) and ankle joints (12,4%). The disease proceeded in the form of an oligoarthritis.

According to statistical data, prevalence of the JIA various forms across Russia and is in the Samara region at one level.

The interrelation of illness with features of the intra family relations is established. Socially - the economic and psychological status of families was characterized by deterioration in financial position, restriction of labor and social activity, formation of parent alarm, an eksternalnost and insufficient knowledge of parents of illness of the child that causes depression of a komplayentnost, underestimation of gravity of illness. Interesting the fact that in families in which the alarm and an eksternalnost prevailed the exacerbation of illness met more often for 66% was represented.

Thus, the research on studying of prevalence of JIA conducted for the first time in the Samara region according to the nomenclature and the international classification, allowed to establish that in the region the indicator of prevalence doesn't differ from the all-Russian indicators, and among the JA forms the oligoarthritis which meets more often at children at the age of six years, mainly at girls prevails. The established dependence of this disease not only on expression of a functional failure and activity of illness, but also on psychological features of the sick child, the relation of parents to illness of the child and features of family education is important.

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