# CHILDREN'S JUVENILE ARTHRITIS IN ANDIJAN REGION PREVALENCE AND CLINICAL FEATURES

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In the article, the issue of the prevalence of juvenile arthritis in children in Uzbekistan and foreign countries was considered. An epidemiological analysis of the prevalence and structure of juvenile arthritis for 2021-2022 was conducted in Andijan region. According to the nomenclature and international classification, it was found that the prevalence in Andijan region, among the forms of juvenile arthritis, oligoarthritis, which is more common in six-year-old children, prevails mainly in girls.

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

# **ДЕТСКИЙ ЮВЕНИЛЬНЫЙ АРТРИТ В АНДИЖАНСКОЙ ОБЛАСТИ РАСПРОСТРАНЕННОСТЬ И КЛИНИЧЕСКИЕ ОСОБЕННОСТИ**

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**Аннотация:** В статье рассматривается проблема ювенильного артрита у детей в Узбекистане и зарубежных странах. В Андижанской области проведен эпидемиологический анализ распространенности и структуры ювенильных артритов за 2021-2022 годы. По номенклатуре и международной классификации установлено, что в Андижанской области среди форм ювенильных артритов преобладает преимущественно у девочек олигоартрит, который чаще встречается у детей шестилетнего возраста.

**Ключевые слова:** детский ювенильный артрит, распространенность, ревматология.

## ANDIJON VILOYATIDA BOLALAR YUVENIL ARTRITINI TARQALISHI VA KLINIK XUSUSIYATLARI

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Maqolada Oʻzbekiston va xorijiy mamlakatlarda bolalarda balogʻatga yetmagan yuvenil artritning tarqalishi masalasi koʻrib chiqildi. Andijon viloyatida 2021-2022 yillarga moʻljallangan voyaga yetmaganlar artritining tarqalishi va tuzilishining epidemiologik tahlili oʻtkazildi.

Nomenklatura va xalqaro tasnifga koʻra, Andijon viloyatida tarqalish darajasi, balogʻatga yetmagan bolalar artriti shakllari orasida esa olti yoshli bolalarda koʻproq uchraydigan oligoartrit ustunlik qilishi asosan qizlarda aniqlandi.

Kalit soʻzlar: bolalar yuvenil artriti, tarqalishi, revmatologiya.

Currently, juvenile idiopathic arthritis (JIA) is widespread among chronic rheumatic diseases in children and adolescents. As a rule, juvenile arthritis often leads to disability in children and worsens the quality of life of both the child and his parents [1].

Worldwide, the incidence and prevalence of chronic arthritis in children is poorly understood [2,4]. Epidemiological studies show great variability across different regions of the world, with low levels in Asian populations and relatively high levels in European populations [3, 5]. Thus, taking into account all subtypes of arthritis, the incidence in Japan ranges from 0.83 per 100,000 children to 23 per 100,000 people in Norway [7]. There is a general trend that this figure is increasing. In Taiwan, the prevalence is 3.8 per 100,000 children [5], in Australia it is up to 400 per 100,000 [6], and in the UK it is 1 per 1000 [9]. On the territory of the Russian Federation, the prevalence of JIA in children under 18 years of age reaches 62.3 [1].

Most likely, the wide variation in data is due to differences between clinical and epidemiological studies regarding inconsistent use of nomenclature, differences and difficulties in making an accurate diagnosis [4], as well as delayed diagnosis due to the inability of patients to receive medical care. In addition, an important factor is the shortage of specialized specialists throughout the world, including pediatric rheumatologists [7,9]. JIA is an umbrella term that describes a group of diseases characterized by arthritis that persists for at least 6 weeks and begins before age 16 years and has no other obvious cause [1, 5, 9].

According to the International League of Rheumatological Associations (ILAR, 2001), JIA is divided into seven subtypes: systemic, oligoarthritis (persistent and widespread), RF polyarthritis - positive, RF polyarthritis - negative; psoriatic arthritis, enthesitis associated with arthritis, undifferentiated [4, 7].

Patients suffering from juvenile arthritis have numerous problems - low quality of life, limitations in physical activity, daily activities, and psycho-emotional response. Juvenile arthritis is a medical and social problem for many countries of the world, including our country.

In Uzbekistan, epidemiological studies based on modern classification approaches, especially in the regions, are insufficiently conducted. In this regard, an assessment was made of the prevalence and structure of juvenile arthritis in the Andijan region for 2021-20122.

The study is descriptive and continuous in scope. Pro- and retrospectively, 100 children with JIA were examined, of which 65% were girls and 35% were boys aged 0 to 16 years. At the time of inclusion in the analysis, the average duration of the disease

in all children was 3.5 years or more. The onset of the disease in children often occurs at three, four, six and sixteen years of age.

The etiology of juvenile rheumatoid arthritis remains poorly understood to date. Most often, according to many authors, a combination of various environmental factors take part in the development of JIA. In the Andijan region, the following etiological factors are presented: 46% - trauma, 25% - previous infection, 20% - hypothermia, and to a lesser extent - % the influence of stress and vaccinations is noted.

Among all types of arthritis in the Andijan region, oligoarthritis was registered in 41.6% of cases, polyarticular seronegative variant - in 27.3%, undifferentiated arthritis - in 9.4%, systemic arthritis - in 8.9%, arthritis associated with enthesitis - in 7.5%, polyarticular seropositive - in 2.0%, psoriatic arthritis - in 0.6% of cases.

When comparing the data obtained with those presented in domestic and foreign literature, it was noted that the systemic variant of arthritis and oligoarthritis is found in the Andijan region more often than abroad and less often than in Uzbekistan, the other variants are approximately equally distributed. According to the clinical course, several subtypes of polyarticular seronegative arthritis are distinguished. In this study, subtype 1 was identified in 53% of children. It is generally accepted that this includes asymmetric arthritis in young children, with frequent development of uveitis, identification of antinuclear factor, predominant in girls. In the Andijan region, uveitis was detected in 67% of children, and antinuclear factor in 59%.

Subtype 2 includes patients with symmetrical polyarthritis of large and small joints, starting at school age, with a negative antinuclear factor. In the Andijan region, 27% of patients belonging to subtype 2 were identified. Subtype 3 occurred in 20% of patients and was characterized by stiffness in the affected joints, flexion contractures and normal ESR values. Thus, in

In the Andijan region, subtype 1 of polyarticular seronegative arthritis predominates.

Depending on the type of joints, the most frequently affected were: knee (63.6%), wrist (7.7%) and ankle joints (12.4%). The disease occurred in the form of oligoarthritis.

The relationship between the disease and the characteristics of intrafamily relationships has been established. The socio-economic and psychological status of families was characterized by a deterioration in their financial situation, limitation of labor and social activity, the formation of parental anxiety, externality and insufficient awareness of parents about the child's illness, which leads to a decrease in compliance and underestimation of the severity of the disease. An interesting fact was that in families in which anxiety and externality prevailed, exacerbation of the disease was 66% more common.

Thus, the first study conducted to study the frequency of JIA in the Andijan region in accordance with the nomenclature and international classification made it possible to establish that in the region this indicator does not differ from the national average,

and among the forms of JIA, oligoarthritis predominates, which occurs more often in children aged six years, mainly in girls.

Of no less importance is the established dependence of this disease not only on the severity of functional deficiency and disease activity, but also on the psychological characteristics of the sick child, the attitude of parents to the child's illness and the characteristics of family upbringing.

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