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# Clinical and demographic characteristics of children with juvenile idiopathic arthritis in Russia: a multicenter registry of the Union of pediatricians of Russia data

**Relevance.** The incidence and prevalence of juvenile idiopathic arthritis (JIA) varies widely in different countries, but the data for the Russian Federation are absent.

**Object.** To study the demographic, clinical and basic laboratory parameters, as well as distribution by variants of JIA course in the Russian Federation on the basis of a multicenter registry data.

**Patients and methods.** Simultaneous (cross-sectional) data study of patients with JIA at the age of up to 18, observed in rheumatology clinics in the Russian Federation and included in the multicenter registry from November 2008 to December 2013. The diagnosis of JIA is set according to criteria of the International League of Associations for Rheumatology 2001 (ILAR).

**Results.** The study included 3210 patients (1259; 39.2% of boys, 1951, 60.8% of girls). The median of age is 11.0 (8.0; 14.0) years. The median of age of the disease' onset is 4.0 (2.0, 8.0) years; of diagnosis setting age - 6.0 (3.0; 10.0) years. JIA structure in accordance with the onset of the disease is as follows: systemic JIA (sJIA) - 698 (21.7%); oligoarticular JIA (oJIA) - 1076 (33.5%); polyarticular (RF-) JIA (RF-JIA) - 1200 (37.4%); polyarticular (RF +) JIA (RF + JIA) - 103 (3.2%); arthritis associated with enthesitis (AAE) - 85 (2.6%); psoriatic arthritis (PA) - 14 (0.4%); undifferentiated arthritis (UA) - 34 (1.1%). Uveitis was diagnosed in 104 (9.7%) patients with oJIA, in 105 (8.8%) - with the RF-JIA. Antinuclear factor was found in 17.4% (95/547) of patients with (RF-) JIA, in 11.3% (43/381) - with sJIA, in 16.8% (62/368) - with oJIA. HLA-B27 antigen was detected in 43% (37/85) of patients with AAE. The most common complication of JIA is osteoporosis and impaired growth. It should be noted that most often they were diagnosed in children with sJIA - 17.0 (125/698) and 14.8% (103/698), respectively. Aseptic necrosis of the joints was diagnosed in 16 (2.3%) patients with sJIA and 4 (0.3%) - with (RF-) JIA. In 2 (0.3%) children with sJIA and 4 (0.3%) patients with (RF-) JIA ankylosis development was diagnosed. Macrophage activation syndrome occurred in 6 (0.9%) children with sJIA.

**Conclusions.** Polyarticular (RF-) and oligoarticular JIA options are occurring more often in the Russian population of children, while enthesitis-associated arthritis is less common than in Western Europe. We assume that it is a feature of children's population, but at the same time, genetic research, and further study of indicated problem are needed.