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CLINICAL MANIFESTATIONS OF JUVENILE IDIOPATHIC ARTHRITIS

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Relevance. Juvenile Idiopathic Arthritis (JIA) is the most common type of chronic arthritis that affects children. While the exact causes of JIA are unknown, it begins when the immune system becomes overactive due various triggers, like infections, vaccinations etc. There are multiple types of JIA, each with distinct features. Generally, they all share arthritic symptoms of joint pain, swelling, warmth, and stiffness that last at least 6 weeks. The goal of treatment in JIA is to avoid the exacerbations as it is a lifelong disease, cannot be cured completely. Some patients acquire remission easily with treatment while others may require lifelong treatment.

Aim: to determine clinical and laboratory manifestations of different variants of JIA.

Materials and methods. We run the retrospective analysis of medical records of 57 patients hospitalized in 2nd city clinical hospital, Minsk, with a diagnosis of JIA for the year 2021. M:F ratio was 18:39. The patients aged between 3-18 years with mean age of 11.6 ± 3.9 years. There were 6 patients with systemic variant and 51 patients non-systemic variant of JIA. Non-systemic variant included 3 patients with monoarticular variant, 41 patients with oligoarticular variant and 7 patients with polyarticular variant. All values are presented as mean \pm SD.

Results and their discussion. The age of onset of JIA varied from 7 months to 13 years with mean age being 4.5 ± 3 years. 6 out of all patients (12 %) had a family history of joint diseases but we failed to find any statistically significant relation with disease severity. In serology, 31% of JIA patients were ANA positive and none were positive for anti-CCP and rheumatoid factor. 14% of children enrolled had eye involvement. The proportion of patients to develop eye involvement was highest in those having systemic-onset disease (50%). Among patients with oligoarthritis 15% were diagnosed with uveitis. 26% of patients developed complications and majority of them (67%) were seen in children who had onset of disease before 5 years of age. There was a tendency found that duration of disease was less in children with non-systemic variant with joint complications (contractures) compared to those without joint complications although not statistically significant ($p=0.074$). All patients received Methotrexate as a first-line treatment, 34 patients (60%) received at least one intraarticular injection of topical corticosteroids (CS) and 39 patients (68%) received systemic CS at least one course. Biologics were used in 18 patients (32%) out of 57 patients

Statistical analysis didn't reveal differences in age of onset, seropositivity and laboratory data on onset between groups of patients with systemic and non-systemic variants of JIA. We found that children with systemic variant of JIA had higher prevalence of eye involvement (3/6) and joint's complications (3/6) than in all other groups.

Conclusion: non-systemic variant was more common than systemic. Most common variant of JIA was oligoarticular variant (72%). In the study females are affected more frequently than males (2:1). Patients with systemic variant of disease had more severe course with joint's complications and eye involvement seen in half of children in this group. ANA was the only antibody that was positive for the disease but the absence of ANA does not exclude the diagnosis of JIA. Methotrexate remains the drug of choice in all cases of JIA, irrespective of variant. Systemic corticosteroids are still frequently used in both systemic and non-systemic JIA (68% of all cases).