An association was observed between both methods and variables of remission or disease activity.

Disclosure of Interests: None declared.


AB1238

THE EFFECT OF DRUG THERAPY IN JUVENILE IDIOPATHIC ARTHRITIS ON THE LEVEL OF CYSTATIN C AS A MARKER OF RENAL Dysfunction

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Background: Juvenile idiopathic arthritis (JIA) is a chronic disease requiring years of therapy with non-steroidal anti-inflammatory drugs (NSAIDs), immunosuppressant’s, cytostatics, immunobiological agents. The aforementioned drugs, namely NSAIDs and cytostatics are potentially nephrotoxic [1]. The above drugs, namely NSAIDs and cytostatics, are potentially nephrotoxic. About 8% of children with JIA have kidney damage, which develops on average 5 years after the onset of the disease. It has been established that the main risk factor for the development of kidney damage is the long-term exposure to NSAIDs and methotrexate in children with active forms of JIA [2]. Early diagnosis of kidney damage will allow timely correction in the dosing of drugs and avoid their nephrotoxic effects [3].

Objectives: To determine the effect of drug therapy in children with JIA on eGFR by using the Cystatin C-based equation and the Hoek formula based on the serum cystatin C study.

Methods: 80 children with JIA participated in the study. The age of subjects was 10.4±4.11 (10.6-16.5) years. All children received methotrexate as a base drug. At the moment of examination 22 children received NSAIDs, 25 children received immunobiological preparations. Serum cystatin C content was determined by enzyme immunoassay. The Cystatin C-based equation 2012 and Hoek formulas were used to set the GFR by serum cystatin C levels.

Results: Non-steroidal anti-inflammatory drugs led to a decrease in GFR as found by both the Cystatin C-based equation 2012 and the Hoek formula. The incidence of GFR reduction in patients treated with NSAIDs using the Cystatin C-based equation 2012 was 100%, and using the Hoek formula was 81.8%. The use of NSAIDs in children with JIA is a risk factor for the development of reduced GFR calculated by the Hoek formula. The incidence of reduced GFR in children with NSAID use was 54.5%, 6.7 times greater than in those without NSAIDs (OR = 12.9; CI: 3.74-44.25; p<0.001). There was a low chance of a Hoek formula decrease in GFR in children with JIA who received immunobiological therapy 9.1% vs 46.8% (OR = 0.11; CI: 0.03-0.42; p<0.001).

Conclusion: Use of NSAIDs in children with JIA was more often associated with a reduction in GFR by the Cystatin C-based equation 2012 in 100% of cases p<0.01, by Hoek in 81.8%, p<0.001. The average of GFR was significantly lower in children treated with NSAIDs than in children without NSAIDs. Immunobiological therapy had a positive effect on the GFR value. The frequency of a decrease in GFR was significantly lower in the children treated with immunobiological therapy compared with those without immunobiological therapy 9.1% vs 46.8% (OR = 0.11; CI: 0.03-0.42; p<0.001).

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AB1240

PROSPECTIVE EVALUATION OF COGNITIVE FUNCTION IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

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Objectives: Prospectively evaluate changes in the cognitive function of patients with juvenile idiopathic arthritis (JIA) and associated factors.

Methods: Design and protocol: We performed a prospective cohort study with JIA patients that participated in a previous cross-sectional study (2019) to evaluate cognitive function. After 24 months, the patients were administered the same test battery previously used through an established protocol, and data was collected from their clinical histories. The neuropsychological tests were corrected by a neuropsychologist and neuropsychologist. Study population: Inclusion criteria: Patients aged >16 years with JIA classified according to the criteria of EULAR 2001. Patients with inflammatory or rheumatic diseases other than JIA, previous neurological disease not associated with the course of JIA, and patients with scores lower than the normal in the manual skill test were excluded. Outcomes: The main variable was cognitive impairment, defined as worsening of ≥2 scaled points above 24 months (2014) in any of the subscales used to evaluate each cognitive area in the Wechsler Adult Intelligence Scale (WAIS). The evaluated cognitive domains and their respective subtests were: Attention/concentration (Digit Span); verbal function (Vocabulary); visuospatial functions (Digit Symbol); problem-solving (Similarities). Depression was evaluated by The Beck Depression Inventory-II (BDI-II): minimal (0-13), mild (14-19), moderate (20-28), and severe (29-63). Other variables: Clinical-epidemiological characteristics; treatments; and inflammatory activity evaluated as the C-reactive protein average (CRP); EULAR PASI-27; and JADAS-27. Statistical analysis: Descriptive analysis, followed by χ² and paired T-Test. Multivariate analysis to identify independent variables associated with impairment of cognitive function in JIA.