Los resultados muestran diferencias significativas entre los cohortes. Se encontraron más mujeres en el grupo jSSC (50,1% versus 43,0%, p<0.001). La media de edad en el momento de inclusión fue de 13,1 (± 3,8) años. Los detalles de sus características descriptivas fueron: media SC (EIA) de 3,1 (± 1,8) μg/ml, media SC (CLIA) de 2,5 (± 1,6) μg/ml, media CRP de 2,6 (± 6,5) mg/l, media ESR de 10,1 (± 11) mm/h, y media PE JADAS de 27,8 (± 8). Los primeros diágonósticos más frecuentes fueron la artritis p oligoartrítica (24,4%), seguidos por artritis relacionada con enfermedad inflamatoria intestinal (2,5%) y poliartritis JIA (12,2%), y poliartritis JIA (12,2%), y poliartritis JIA (12,2%), y poliartritis JIA (12,2%).

Conclusiones: Los pacientes JSSC tienen una mayor proporción de mujeres (50,1% versus 43,0%, p<0.001). La media de edad en el momento de inclusión fue de 13,1 (± 3,8) años. Los detalles de sus características descriptivas fueron: media SC (EIA) de 3,1 (± 1,8) μg/ml, media SC (CLIA) de 2,5 (± 1,6) μg/ml, media CRP de 2,6 (± 6,5) mg/l, media ESR de 10,1 (± 11) mm/h, y media PE JADAS de 27,8 (± 8). Los primeros diagnósticos más frecuentes fueron la artritis oligoarticular (24,4%), seguidos por artritis relacionada con enfermedad inflamatoria intestinal (2,5%) y poliartritis JIA (12,2%), y poliartritis JIA (12,2%).

Disclosure of Interests: None declared


AB1237

COMPARISON BETWEEN ENZYME IMMUNOASSAY AND CHEMILUMINESCENCE TO DETERMINE THE CONCENTRATION OF SERUM CALPROTEIN AND ITS ASSOCIATION WITH CLINICAL VARIABLES IN PEDIATRIC RHEUMATOLOGY.

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Background: Serum calproteín (SC) is an emerging biomarker in the measurement of inflammation. It can be determined by different techniques, such as enzyme immunoassay (EIA) or chemiluminescence (CLIA). However, there are no studies comparing whether there is a correlation between the two diagnostic methods in paediatric rheumatic diseases.

Objectives: (i) To assess whether there are differences between serum calproteín (SC) levels determined by EIA (Bühlmann) method and CLIA (QUANTA Flash) in pediatric age patients with systemic autoimmune rheumatic disease (SARD). (ii) To evaluate which clinical and analytical variables are associated with an increase of SC in each method.

Methods: Analytical cross-sectional study that included patients from a pediatric rheumatology specialized unit between 02/2017 and 05/2021. We included 41 patients with SARD who had at least one SC analysis determined by EIA in their routine controls (144 serum) and afterwards had SC determined again, this time using the CLIA method. The collected variables were sex, age, remission according to clinical judgment, swollen joint count according to physical examination (PE Count) and ultrasound (US Count), Juvenile Arthritis Disease Activity Score according to physical examination (PE JADAS-27) and ultrasound (US JADAS-27), C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR). As for the statistical analysis, intraclass correlation (ICC) and paired samples t-test were performed to compare the two methods. Univariate linear regression was performed to study the association between EIA, CLIA and both clinical and analytical variables.

Results: We included 41 patients, 50.1% were women with a mean age ± SD of 13.1 (± 3.8) years. The details of their descriptive characteristics were: mean SC (EIA) of 3.1 (± 1.8) μg/ml, mean SC (CLIA) of 2.5 (± 1.6) μg/ml, mean CRP of 2.6 (± 6.5) mg/l, mean ESR of 10.1 (± 11) mm/h, and mean PE JADAS-27 of 27.8 (± 8). Most frequent diagnosis was oligoarticular juvenile idiopathic arthritis (JIA) (24.4%), followed by enthesitis-related (ERA) JIA (12.2%) and polyarticular JIA (12.2%), familial Mediterranean fever (FMF) (9.8%), psoriatic JIA (9.8%), systemic JIA (9.8%) and syndrome of periodic fever, aphthous stomatitis, pharyngitis, and cervical adenitis (PFAPA) (9.8%), vasculitis (4.8%), and undifferentiated JIA (2.4%). Clinical diagnosis was unspecific in 9.8% of the patients. In our sample, 66.7% were in clinical remission at the discretion of the specialist. A statistically significant Pearson’s CCI of 0.77 (95% CI 0.70-0.83; p<0.001) was observed between both methods above the value of 4 μg/ml. This fact could be explained by methodological differences, since CLIA discriminates better at higher values than EIA.
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 dosage 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 levels.

Methods: 80 children with JIA participated in the study. The age of subjects was 10.4±4.41 (10.6-15.0) 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: 3.76-44.25; 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 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 children treated with immunobiological therapy compared with those using immunobiological therapy 9.1% vs 46.8% (OR = 0.11; CI: 0.03-0.42; p<0.001).

REFERENCES:

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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 JLA/ILAR 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 after 24 months (V24) 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); organization (Block Design); working memory (Letter-Number Sequencing); 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) at the follow-up. Statistical analysis: Descriptive analysis, followed by y2 and paired T-test. Multivariate analysis to identify independent variables associated with impairment of cognitive function in JIA.