Conclusion: Male patients, polyarticular involvement (with negative or positive RF) and bilateral uveitis were more frequently treated with bDMARDs. In addition, CRP values at onset of JIA were higher in the bDMARD group. Thereby, the presence of uveitis and polyarticular involvement seem to predict the need of bDMARD treatment in JIA patients. Prompt treatment with these agents, early in the disease course, especially in JIA patients with more articular involvement and extraarticular manifestations like uveitis, refractory to conventional DMARDs, should be strongly recommended, in order to avoid irreversible damage and to achieve complete and long-term remission.

REFERENCES: NIL.
Acknowledgements: NIL.
Disclosure of Interests: None Declared.
DOI: 10.1136/annrheumdis-2023-eular.1102

AB1415 INVESTIGATION OF THE EFFECTS OF HEALTH LITERACY LEVELS OF PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS AND THEIR FAMILIES ON THE GENERAL HEALTH STATUS, QUALITY OF LIFE AND PHYSICAL FUNCTION CAPACITY OF THE PATIENTS

Keywords: Inflammatory arthritides, Patient information and education, Quality of life

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Background: Juvenile idiopathic arthritis is a chronic rheumatological disease characterized by persistent joint inflammation [1, 2]. This disease, which we can consider to be relatively rare, causes pediatric patients to encounter health problems at an early age and therefore struggle with more questions and problems than their peers [3]. At this point, it is important that both children and their families have access to adequate and accurate information about health and that they can use this information [4]. Access to health-related information has brought the concept of "health literacy", which has become more important in recent years, to the agenda [5].
Objectives: Our primary aim is to reveal the health literacy levels of children with JIA and their caregivers by using the Turkish Health Literacy-32 (THL-32), Adult Health Literacy Scale (AHLS) and Turkish version of the Health Literacy for School-Aged Children (HLSAC-T) the validity and reliability studies of which have been done before [6-8]. In addition, revealing the relationship between health literacy and the health status and quality of life of children with JIA is the secondary main aim of the study. Another secondary aim is to evaluate the physical limitations and functional capacity caused by JIA.
Methods: This cross-sectional study was conducted between September and December 2022 at Hacettepe University. Inclusion criteria were a confirmed JIA diagnosis according to the International League Against Rheumatism (ILAR) criteria, aged between 9–18 years. Children and one of their parents were invited to study. Demographic data, clinical findings, laboratory findings, and previous treatment information were recorded retrospectively from patient files and by asking the participants themselves. THL-32, AHLS, and HLSAC-T questionnaires were used to assess health literacy. Functional ability was assessed with the Turkish version of the Childhood Health Assessment Questionnaire (CHAQ) [9]. The Juvenile Arthritis Biopsychosocial Questionnaire (JAB-Q) was used to evaluate the problems experienced by both the child and the parent from a biopsychosocial perspective [10]. The 6-minute walk test (6MWT), 10-meter walking test (10-MWT) and 10-stair climbing test (10-SCT) were used to evaluate the physical and exercise capacity of children [11, 12].
Results: Seventy-nine patients with JIA and one of their parents were included in the study. The patients' mean age was 13.67 ± 2.80 years, and 60.8% of them were female. The mean disease duration was 6.75 ± 4.28 years. The JIA subtypes were as follows: 39 (49.4%) had oligoarticular JIA; 15 (19.0%) had polyarticular JIA; 19 (24.1%) had enthesitis-related arthritis; and 6 (7%) had systemic JIA. Following the THL-32 scale scoring, level of parents' health literacy resulted in the following percentages: inadequate, 3.8%; problematic, 22.8%; sufficient, 34.2%; and excellent, 39.2%. From a total of 79 patients with JIA, 16.5% had low HL, %55.7 had moderate HL, and 27.8% had high HL. The mean age of children with high health literacy was statistically older than the group with medium health literacy (p< 0.017). There was no statistically significant relationship between the children's health literacy and parent health literacy.
Conclusion: According to the results of our study, children's health literacy levels show a positive increase as they get older, and there is no significant relationship between parents' health literacy levels. Parents' health literacy levels and education levels are compatible with the AHLS, which includes objective questions. As the education level of the families increases, positive changes are observed in the CHAQ, JAB-Q parameters and 10-SCT test results. Our study shows that the education level of the families is positively related to the quality of life and physical condition of the children, but health literacy is not statistically related to other parameters other than the age of the children.

REFERENCES: NIL.
Acknowledgements: NIL.
Disclosure of Interests: None Declared.
DOI: 10.1136/annrheumdis-2023-eular.1270

AB1416 INTERFERON SIGNALIZATION IN CHILDREN WITH JUVENILE SCLERODERMA

Keywords: Skin, Vasculitis, Myositis

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Background:
Interferon Signalization in children with Juvenile Scleroderma: Hulya Kose[1], Abdurrahman Simsek[2], Muhammed Ali Kizmaz[2], Tugce Bozkurt, [2] Ferdi Ozturk[3], Ferah Budak [2], Hayriye Sarıcaoglu[3] Sara Sebnem Kilic [1]
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Juvenile dermatomyositis (JDM) is an inflammatory disease of the muscle, which is characterized by skin involvement, vasculitis, and progressive muscle weakness. Increased interferon signaling is thought to play a role in the pathogenesis of JDM and is associated with disease severity and activation, as well as the development of calcinosis. Juvenile scleroderma (JSc) is a heterogeneous group of diseases associated with sclerotic skin lesions, grouped together as systemic sclerosis and localized scleroderma (morphea). Although JSc has a different types of skin involvement than JDM, some similarities in their pathogenesis can be identified.
Objectives: The aim of this study is to measure the levels of cytokines and chemokines involved in interferon signaling in patients with JDM and JSc and to determine their correlation with disease severity.
Methods: Thirty-one JSc, 5 JDM, and 13 healthy controls were included in the study. Patients with morphea were scored according to the LoSCAT (activity index) and LoSDI (damage index) indices. Cytokines and chemokines involved in interferon gene signaling (IL -8, IL -1, IP-10, MCP1, TNF-α, CXCL-10, IFN-α, IFN-β, IFN-γ) and interferon signalizing genes including IFI27, IFI44, ISIG15, IFIT1, OAS1, RSAD2 were measured by ELISA and RT_PCR method respectively.
Results: The ratio of female to male patients was 24/12, the median age was 14 years (min 4, max 18), and the median follow-up time was 36 months (min 12, max 108). According to LoSCAT assessment of patients with JSc, the scores were mild 36% (n=13), moderate 25% (n=9), and severe 11% (n=4). Similarly, LoSDI assessment revealed mild 38% (n=14), moderate 22% (n=8), and severe 11% (n=4). It was found that IL-8, IFN-β, IP-10, and MCP-1 were significantly decreased in patients with JSc compared with the healthy control group. TNF-α and IFN-γ were found to tend to decrease in patients with JSc, whereas IFN-α tended to increase in patients with JDM. The correlation of LoSCAT and LoSDI indices with cytokine and chemokine levels in patients with JSc is summarized in Figure 1. In RT_PCR analysis of the interferon signaling genes, including IFI27, IFI44, ISIG15, IFIT1, OAS1, RSAD2, we found no statistically meaningful expressions of the genes compared with the healthy group. However, we identified the fold changes in RSAD2, IFI27, and IFIT1 in JDM and JSc patients compared with the healthy controls in the related genes. The fold changes of the interferon signaling genes are depicted in Figure 2.

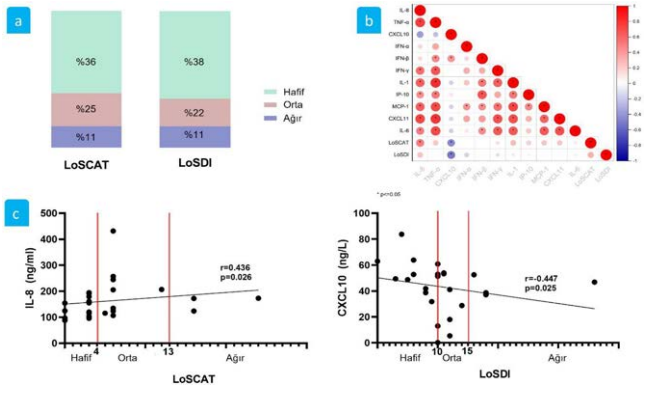


Figure 1. Correlation of LoSCAT/LoSDI Scores with cytokines and chemokines in patients with Localized Sclerodermaa. LoSCAT/LoSDI asssesment. b. Cytokine and chemokine correlation map, c. Statistically significant correlations

Ann Rheum Dis: first published as 10.1136/annrheumdis-2023-eular.1487 on 30 May 2023. Downloaded from http://ard.bmj.com/ on June 19, 2023 by guest. Protected by copyright.

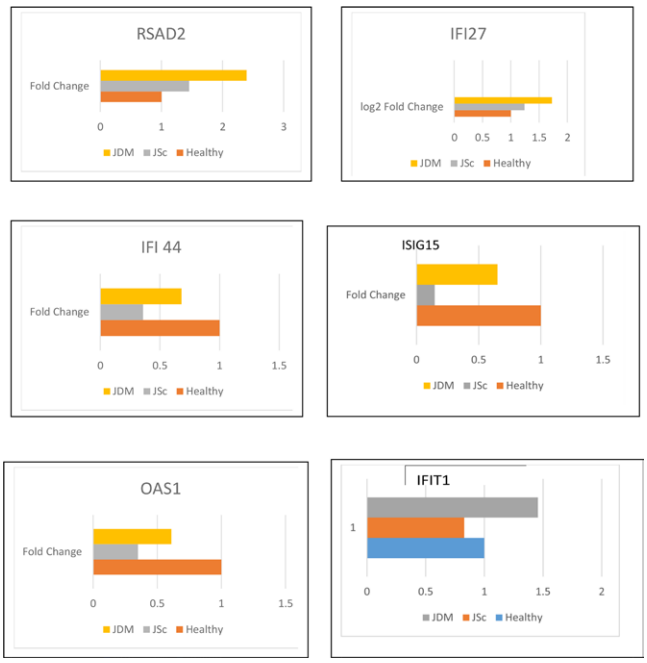


Figure 2. The diagrams of the interferon signaling genes

Conclusion: The results suggest that interferon signaling may be impaired in patients with JDM and JSc, and that cytokines and genes whose significant changes were observed in this study may play a key role in monitoring disease activity. Repeating these studies with larger numbers of patients may shed light on the clinical pathogenesis.

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Acknowledgements: NIL.

Disclosure of Interests: None Declared.

DOI: 10.1136/annrheumdis-2023-eular.1487

AB1417 HOW TO DIAGNOSE: JUVENILE PSORIATIC ARTHRITIS. MULTICENTER PROSPECTIVE OBSERVATIONAL STUDY IN CHILDREN WITH SUSPECTED DIAGNOSIS

Keywords: Inflammatory arthritides

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Background: Juvenile psoriatic artritis (JPSA), a subtype of juvenile idiopathic arthritis (JIA), constitutes 5% of JIA. The literature is inconsistent regarding features of JPSA, and physicians debate whether it is a distinct entity within JA. Moreover, the criteria diagnosis for JPsA is currently in debate.There are two pediatric diagnostic classifications based on clinical criteria: ILAR classification criteria and Vancouver classification criteria. Classification of JIA has been a great debate since this entity disappeared. [1] The CASPAR criteria are standard in adults. These criteria have a specificity of 91.4% and a sensitivity of 98.7%, makingdiagnostic classification easier. However, the peculiarities of childhood cause some differences to consider.

Objectives: To compare 3 diagnostic criteria for JPSA ILAR, Vancouver and CASPAR.

Methods: Multicenter, cross-sectional study of data from children with JPsA (diagnosis by prescritor physician) who consecutivelly attended in ped-rheumatology outpatient clinic and enrolled from 9 centers within the last 1.5 years. Sociodemographic, clinical characteristics and family history of Psoriasis were collected to assess compliance with diagnostic classification criteria using using the Cohen's Kappa statistic index.

Results: Forty eight children were included with the following sociodemographics characteristics;(table1) Thirty eight children who met the VANCOUVER criteria (80,9%) while thirty two children met the ILAR criteria (68.1%). As for the CASPAR criteria, thirty eight children were diagnosed (80.9%). The diagnostic agreement between the ILAR and CASPAR criteria and ILAR and Vancouver criteria (diagnosed defined) was weak (K=0.67 and K=0.67). In contrast, the agreement was total (K=1 between the CASPAR and Vancouver criteria.

Conclusion: Despite minimal changes between the Vancouver and ILAR criteria, the ILAR exclusion criteria limit the diagnosis of PsA in childhood. Given that the CASPAR and Vancouver were able to detect a significant number of patients with PsA in our series (predominantly adolescents), the application of the CASPAR criteria in the subgroup of children with late onset could be considered.

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Table 1. Clinical and demographic data of the study population

	Total (n=48)
Sex, female (%)	34(70.8)
Age at inclusion (years), mean (SD)	11.5(4)
Age at articular onset (years), mean (SD)	7.1(5)
Age at psoriasis onset (years), mean (SD)	10(3.2)
Type of onset	
Oligoarthritis n (%)	33(68.7)
Poliarthritis n (%)	12(25)
No arthritis n (%)	3(6.2)
Family with Psoriasis	39(81.2)
Extra-articular involvement	
Uveitis n (%)	(12.5)
Entesitis n (%)	7(14.6)
Onicopathy n(%)	14(29.2)
---.Skin-Psoriasis	26(54.2)
Lab	
AAN: positive n (%)	19(39.5)
RF: negative n (%)	48(100)
HLAB27: negative n (%):	43(89.6)

Acknowledgements: NIL.

Disclosure of Interests: Natalia Palmou-Fontana: None declared, Inmaculada Calvo Speakers bureau: ABVIEE, NOVARTIS, JANSEN, GSK, GISELLA DIAZ CORDOVES REGO: None declared, ADRIAN GARCIA-ROGERO: None declared, Juan Carlos Lopez Robledillo: None declared, Berta Paula Magallares López: None declared, Pablo Mesa del Castillo: None declared, ESTEFANIA MORENO RUZAFA: None declared, CARLOS REDONDO-FIGUERO: None declared, MARTINA STEINER: None declared, PAZ COLLADO: None declared.

DOI: 10.1136/annrheumdis-2023-eular.1883

AB1418 SYSTEMIC JUVENILE ARTHRITIS: EPIDEMIOLOGY AND LONG-TERM OUTCOME IN WESTERN AUSTRALIA.

Keywords: Epidemiology, Registries

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Background: Systemic juvenile arthritis (S-JIA) is a rare but serious multiorgan autoinflammatory condition of childhood with an unpredictable disease course [1]. There is no data on disease frequency and outcome of S-JIA from the Pacific region.

Objectives: To investigate the epidemiological characteristics and long-term disease outcome in patients hospitalised with S-JIA in Western Australia (WA).

Methods: This population-level observational study includes children under the age of 16 with a recorded diagnosis of S-JIA (ICD-10-AM M08.20-M08.29) residing in WA between January 1999 and December 2014. Individual longitudinal health data regarding hospital admissions, ED visits, cancer and death were derived from the WA Rheumatic Disease Epidemiological Registry (WARDER) that contains routinely collected health data from public and private health care organisations for the entire state of WA.

Results: Based on 46 incident cases (71.7 % girls, median age 6.5 years) the average annual S-JIA incidence rate was 0.61/100,000 (CI 0.28-1.25), which did

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