Conclusion: Yoga, anti-inflammatory diet and self-monitoring have shown extremely beneficial effects in children with rheumatic diseases in multiple ways.

Table B: Monitoring Parameter	Experimental group (n=14)	Control Group (n=8)
Improvement in disease activity	13 (92.8%)	6 (75%)
Relief in pain and fatigue	12 (85.71%)	3 (37.5%)
Optimum weight maintenance	10 (71.42%)	1 (12.5%)
Improvement in routine activity and school performance	12 (85.71%)	4 (50%)
Improvement in mood and behavioural problems	12 (85.71%)	2 (25%)
Knowledge, awareness and involvement of patient and family members in disease management	12 (85.71%)	2 (25%)
Adherence to management	14 (100%)	6 (75%)
Use of alternative medicines	1 (7.14%)	3 (37.5%)
Early identification of risk factor/s	5 (35.71%)	0 (0%)

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AB0974 ANALYSIS OF DYSLIPIDEMIA IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease and is characterized by multiple autoantibodies associated with a multisystem illness. However, studies of dyslipidemia in pediatric SLE patients are limited.

Objectives: The aim of our study is to describe the lipid profiles associated with disease activity and organ damage and their correlation with laboratory parameters in pediatric SLE patients.

Methods: We retrospectively reviewed medical records from a single tertiary hospital in Taipei, Taiwan from 2002 to 2018. One hundred and twenty-four patients diagnosed with SLE were included. Dyslipidemia is defined as elevations in total cholesterol (TC), low-density lipoprotein (LDL), and triglyceride (TG) levels, and a reduction in high-density lipoprotein (HDL) levels. We gathered all of the lipid profiles, clinical characteristics, and laboratory parameters from each patient. Pediatric SLE patients participated in this study, based on their lipid profile, were classified as dyslipidemic or not. The mean values of each evaluated parameters were calculated and analyzed with generalized estimating equation (GEE) method.

Results: Total thirty-one SLE patients were enrolled; twenty-four (77%) patients had dyslipidemia. The levels of total cholesterol, TG, and LDL in the dyslipidemic group are significantly higher than those of non-dyslipidemia (214.0 mg/dL vs 145.0 mg/dL, 130.1 mg/dL vs 76.4 mg/dL, 138.7 mg/dL vs 82.0 mg/dL; respectively). The mean values of white blood cell count (6726/ μ L) in dyslipidemia group are significantly higher than non-dyslipidemia group (4521/ μ L; $p=0.0157$). In contrast, the level of high-sensitivity CRP in the non-dyslipidemia group (0.2 mg/dL) are significantly lower than those of patients with dyslipidemia (0.49 mg/dL; $p=0.0486$).

Conclusion: It has been well known that CRP could suppress HDL and increase TG and that elevation of CRP might indicate increased cardiovascular risk. Our results demonstrated that elevated high sensitivity CRP levels were noted in SLE patients with dyslipidemia. It is suggested that routine monitoring of cardiovascular risk factors, such as dyslipidemia, should be recommended for pediatric SLE patients.

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AB0975 LIPID PEROXIDATION AND ANTIOXIDANT PROTECTION IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS ON BIOLOGICAL THERAPY

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Background: Juvenile idiopathic arthritis (JIA) is a chronic immuno-inflammatory joint disease that leads to a child's disability. Currently, drugs aimed at the main pro-inflammatory cytokines, such as tumor necrosis factor (TNF), interleukin-1 (IL-1), interleukin-6 (IL-6), and others, are successfully used to treat JIA. The effect of these drugs on metabolic processes has been little studied.

Objectives: The purpose of the study was to determine the state of lipid peroxidation and antioxidant protection in children with JIA receiving biological therapy.

Methods: 28 children with polyarticular JIA, 15 children with systemic JIA and 20 healthy children were examined at the republican center of pediatric rheumatology on the basis of the rheumatology department of the 4th city children's clinical hospital in Minsk. All patients received methotrexate, non-steroidal anti-inflammatory drugs, and glucocorticoids as needed.

Determination of lipid peroxidation (LPO) and serum ACL and ACW were performed at the BelMAPO Central Research Laboratory. Statistical data processing was performed by traditional methods of variation statistics on a personal computer using the Statsoft Statistica 6.0 program.

Results: During the study, prior to the use of tocilizumab, results were obtained that indicate the activation of lipid peroxidation processes and the violation of antioxidant defense processes in children with JIA. A significant ($P < 0.05$) increase in the level of lipid peroxidation products in the blood serum of children with JIA compared with healthy children was established: the content of dienconjugates in the blood of children with JIA was 3.12 ± 0.51 opt.pl., in healthy children - 1.65 ± 0.4 units of opt.pl., the content of dienketones in children with JIA - 2.32 ± 4839 units of opt.pl., in healthy children - 0.19 ± 0.08 units of opt.pl., the content of malondialdehyde in children with JIA is 9.14 ± 1.84 μ mol/L, in healthy children - 7.13 ± 1.35 μ mol/L. A significant ($P < 0.01$) decrease in the serum ACW and ACL in the blood serum of children with JIA was established when compared with the control group: the ACW content in children with JIA was 10.61 ± 5.8 μ mol/L, in healthy children - 13, 72 ± 5.24 μ mol/L, ACL content in children with JIA - 7.21 ± 2.65 μ mol/L, in healthy children - 8.81 ± 3.5 μ mol/L.

During the treatment with tocilizumab, a remission of the disease was achieved. According to the results of a repeated study of lipid peroxidation and antioxidant protection 6 months after the start of biological therapy, a decrease in LPO activity and an increase in the antioxidant ability of substances in blood serum were found. Thus, the content of dienketones decreased to 1.05 ± 0.17 units of optical density, dienconjugates to 2.4 ± 0.6 units of optical density, and malondialdehyde to 6.3 ± 1.7 μ mol/L. The content of ACW increased to 12.91 ± 3.3 μ mol/L, and ACL to 8.9 ± 3.5 μ mol/L.

Conclusion: The results indicate a positive effect of tocilizumab therapy on lipid peroxidation and antioxidant protection in children with JIA.

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AB0976 CAPTURING THE ENTHESITIS RELATED ARTHRITIS CONTEMPORARY PROFILE OF NORTHERN GREEK PATIENTS IN THE ERA OF BIOLOGICS

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Background: Enthesitis-Related Arthritis (ERA) is a subtype of Juvenile Idiopathic Arthritis (JIA) subtype with an estimated prevalence ranging from 8% to 37.4%. The improvement of the disease course and outcome has been