Table 1.

Table 1

Epidemiological and clinical features	Patients (27)	Healthy control (30)
Age (m±sd)	48.7±11	49.1±10
F/M	21/6	20/10
Comorbidity		
Hypertension	4	5
Obesity	2	3
Diabetes	1	1
Rheumatic disease		
Psoriatic arthritis / Spondylo-arthritis	10/3	
Rheumatoid arthritis	6	
Systemic sclerosis / Sjogren syndrome/SLE	5/1/2	
Therapy		
TNF-i	5	
Small molecules	3	
Anti-IL17	3	
OH-clorochine	5	
Methotrexate /Mycophenolate	4/1	
Anti-il 12/23	2	
Anti-IL 6 /CTLA4–Ig	1/1	
No therapy	2	

Acknowledgements: I thank the Italian League of Systemic Sclerosis for launching a survey for ssc patients.
Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.3529

POS1249 MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN DURING THE COVID-19 PANDEMIC IN TURKEY: FIRST REPORT FROM THE EASTERN MEDITERRANEAN

Y. Ozsurekci[1], S. Gürlevik[1], S. Kesici[2], U. Kaya Akca[3], P. D. Oygar[1], K. Aykac[4], D. Karacanoglu[2], O. Sarıtas Nakip[2], S. Ilbay[1], B. Katlan[2], A. B. Cengiz[1], Ö. Basaran[3], B. C. Cura Yayla[4], J. Karakaya[5], Y. Bilginer[3], B. Bayrakci[2], M. Ceyhan[1], S. Özen[3]. *[1]Hacettepe University School of Medicine, Department of Pediatric Infectious Diseases, Ankara, Turkey*; *[2]Hacettepe University School of Medicine, Department of Pediatrics, Division of Pediatric Intensive Care Unit, Ankara, Turkey*; *[3]Hacettepe University School of Medicine, Department of Pediatrics, Division of Pediatric Rheumatology, Ankara, Turkey*; *[4]University of Health Science Ankara Training and Research Hospital, Department of Pediatric Infectious Diseases, Ankara, Turkey*; *[5]Hacettepe University School of Medicine, Department of Bioistatistics, Ankara, Turkey*

Background: The severity of COVID-19 symptoms can range from mild to severe. Severe COVID-19 cases with excessive hyperinflammation have many overlap features with multisystem inflammatory syndrome in children (MIS-C).
Objectives: We aimed to describe the typical clinical and laboratory features and treatment of children diagnosed with MIS-C and to understand the differences as compared to severe/critical pediatric cases with COVID-19 in an eastern Mediterranean country.
Methods: Children (aged <18 years) who diagnosed with MIS-C and severe/critical pediatric cases with COVID-19, were admitted to hospital between 26 March and 3 November 2020 were enrolled in the study.
Results: A total of 52 patients, 22 patients diagnosed with COVID-19 with severe/critical disease course and 30 patients diagnosed with MIS-C. Although severe COVID-19 cases and cases with MIS-C share many clinical and laboratory features, MIS-C cases had longer fever duration and higher rate of the existence of rash, conjunctival injection, peripheral edema, abdominal pain, altered mental status, and myalgia than in severe cases (p<0.001 for each). Of all, 53.3% of MIS-C cases had the evidence of myocardial involvement as compared to severe cases (27.2%). Additionally, C-reactive protein (CRP) and white blood cell (WBC) are the independent predictors for the diagnosis of MIS-C, particularly in the existence of conjunctival injection and rash. Corticosteroids, intravenous immunoglobulin (IVIG), and biologic immunomodulatory treatments were mainly used in MIS-C cases rather than cases with severe disease course. There were only 3 deaths among 52 patients, one of whom had Burkitt lymphoma and the two cases with severe COVID-19 of late referral.
Conclusion: Differences between clinical presentations, acute phase responses, organ involvements, and management strategies indicate that MIS-C might be a distinct immunopathogenic disease as compared to pediatric COVID-19. Conjunctival injection and higher CRP and low WBC count seem good diagnostic parameters for MIS-C cases.
Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.3572

POS1250 VITAMIN D DEFICIENCY IS MAINLY ASSOCIATED WITH SEVERE LUNG INVOLVEMENT, LONGER DISEASE DURATION AND RISK OF DEATH IN ELDERLY COVID-19 PATIENTS

A. Sulli[1], E. Gotelli[1], A. Casabella[1], M. Grosso[2], C. Schenone[1], C. Pizzorni[1], S. Paolino[1], E. Alessandri[1], V. Smith[3], M. Cutolo[1]. *[1]Laboratory of Experimental Rheumatology and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, IRCCS San Martino Polyclinic Hospital, Genova, Italy*; *[2]Pneumology Unit, IRCCS San Martino Polyclinic Hospital, Genova, Italy*; *[3]Department of Rheumatology, Ghent University Hospital, Department of Internal Medicine, VIB Inflammation Research Centre Ghent University, Ghent, Belgium*

Background: Vitamin D regulates the innate and adaptive immune system responses and low vitamin D levels have been associated with the increased risk of respiratory tract infections (1). Vitamin D deficiency has been recently reported to interfere with the prognosis of COVID-19 (2,3).
Objectives: The aim of this study was to correlate the 25OH-vitamin D serum levels with lung involvement and disease severity, in a cohort of elderly patients hospitalized for SARS-CoV-2 infection.
Methods: Sixty-five COVID-19 patients (mean age 76±13 years) and sixty-five sex- and age-matched control subjects (CNT) were included in the study. Respiratory parameters (PaO_2, SO_2, $PaCO_2$, PaO_2/FiO_2), clinical and laboratory parameters (including 25OH-vitamin D, D-dimer, C-reactive protein) and type of radiological pulmonary involvement were collected at hospital admission. Statistical analysis was performed by non-parametric tests.
Results: Vitamin D sufficiency (>30 ng/ml), insufficiency (between 20 and 30 ng/ml), deficiency (between 10 and 20 ng/ml) and severe deficiency (<10 ng/ml) were observed respectively in 11, 11, 21 and 57 % of COVID-19 patients. Vitamin D serum levels were found significantly lower in COVID-19 patients than in CNT (median 8 vs 16 ng/ml, p=0.001). A statistically significant positive correlation was observed between vitamin D serum levels and SO_2 (p=0.05), PaO_2 (p=0.03), PaO_2/FiO_2 (p=0.02). A statistically significant negative correlation was found between vitamin D serum levels and severity of radiologic pulmonary involvement: vitamin D was significantly lower in COVID-19 patients with either diffuse/severe interstitial lung involvement (p=0.05) or multiple lung consolidations (p=0.0001) than in those with mild radiological lung involvement. Significantly lower vitamin D serum levels were found in COVID-19 patients who died during hospitalization, compared to those who survived (median 3 vs 8 ng/ml, p=0.05). Finally, a statistically significant negative correlation was found between vitamin D serum levels and D-dimer (p=0.04), C-reactive protein (p=0.04) and disease duration (p=0.05).
Conclusion: This study confirms that severe vitamin D deficiency is associated with more severe lung involvement, longer disease duration and risk of death in elderly COVID-19 patients.
REFERENCES:
[1] Cutolo M, et al. RMD Open. 2020; 6(3):e001454.
[2] Bilezikian JP, et al. Eur J Endocrinol. 2020; 183(5):R133-R147.
[3] Weir EK, et al. Clin Med (Lond). 2020; 20:e107-e108.
Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.3576

POS1251 ROLE OF SYSTEMIC AUTOINMUNE CONDITIONS IN HOSPITAL ADMISSIONS RELATED TO COVID-19

I. Perez-Sancristobal[1], L. Lopez Pedraza[2], M. P. Álvarez Hernandez[1], J. I. Colomer[3], A. Madrid García[2], B. Fernandez[1], C. Martinez Prada[1], L. Rodriguez Rodriguez[2], A. Mucientes[2], L. León[2], L. Abasolo[2]. *[1]Hospital Clínico San Carlos, Reumathology, Madrid, Spain*; *[2]Instituto de Investigación Sanitaria del Hospital Clínico San Carlos, Reumathology, Madrid, Spain*; *[3]Fundación para la Investigación Biomedica, Reumathology, Madrid, Spain*

Background: The COVID-19 pandemic continues worldwide and has had a strong impact on public health, quality of life and economy of the general population. To date, the number of infections and deaths are still increasing. From the beginning of the pandemic, efforts were intensified to identify risk factors for development of the severe form of COVID-19. In this sense underlying medical comorbidities have been shown to have a worse prognosis in these patients.