SARS-COV-2 INFECTION IN TWO PATIENTS WITH JUVENILE LUPUS

Toumi Hanane1, Faid Tiaza1, Sakhi Asmaa1 and Bouayed Kenza1
1Pediatric Rheumatology, Internal Medicine and Nephrology Service, Mother-Child Hospital A. Harouchi, IbnRochd UHC, Casablanca, Morocco

Background
The new SARS-COV-2 pandemic affects both children and adults, with a low pediatric percentage of < 1%. The severity and death rate of this disease are lower in this age range. The pediatric populations who are most likely to develop severe COVID 19 are those with particularly immunosuppressive comorbidities. Juvenile systemic lupus erythematosus (jSLE) which represents the prototype of autoimmune diseases, constitutes a predisposing ground for severe viral infections, related to immune dysfunction; linked on one hand to the disease, and on the other hand to the numerous immunosuppressive treatments prescribed. In this context, a great risk was incurred by patients with jSLE. The aim of this work is to assess the severity of COVID 19 infection in our patients with jSLE

Methods and results
Among 20 cases of jSLE hospitalized during the year 2020, we report 2 medical cases report of patients aged 9 and 8, respectively, followed-up in our tertiary care unit for jLES based on the criteria of the Systemic Lupus International Collaborating Clinics “SLICC 2012” and the American College of Rheumatology “ACR 2019”, and who developed a cough, progressing dyspnea and feverish. The Covid 19 was confirmed by a positive PCR for SARS-COV-2. The chest X-ray showed a systematized right cavity in 1 case. Thoracic CT showed foci of alveolar condensation systematized with air bronchogram sign extended to > 25%, associated with bilateral subpleural ground glass areas centrally and peripherally compatible with moderate pneumonia type COVID 19 in one case. The patients were in flare of their lupus disease, proven by the consumption of the C3 and C4 fractions of the complement. They were treated according to the national COVID 19 infection management plan comprising azithromycin at a dose of 20 mg/kg/day on D1 then 10 mg/kg/day for 6 days, increasing the doses of hydroxychloroquine, associated with vitamin therapy (vitamin C, Zinc, vitamin D), the evolution was favorable after 7 days of treatment. Conclusion
Reassuringly, several studies have shown that the clinical course of covid 19 in SLE does not appear to be more severe than in the general population. The hydroxychloroquine prescribed routinely in patients with SLE does not protect against covid 19, but may prevent the occurrence of severe forms.