P025 RISK ASSESSMENT OF COVID 19 IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

Cherif Ines, Dorrà Ben Nessib, Kaouthar Maatallah, Hanene Ferjani, Wafa Triki, Dhia Kaffel and Wafa Hamdi

Faculty of Medicine of Tunis, University Tunis El Manar, Tunisia

Background

On March 11th, 2020 the World Health Organization declared the coronavirus outbreak a global pandemic. Since then, the world has faced multiple flares. In March 2021, the third wave hit Tunisia, resulting in a total of 331,674 confirmed cases and 12,089 Covid-19 related deaths (on May 19th, 2021). Among these reported cases, 11,600 were children under the age of 18.

Patients with inflammatory rheumatic diseases undergoing immunosuppressive treatment are considered immunocompromised. Therefore, it is only fair to question whether children suffering from juvenile idiopathic arthritis (JIA) are specially at risk during this pandemic. Our objective was to assess the impact of the Covid-19 pandemic on patients with JIA.

Methods

We conducted a cross-sectional study including patients with JIA, all fulfilling the International League of Associations for Rheumatology (ILAR) criteria. We prepared a questionnaire evaluating the clinical data of our patients during the outbreak. We asked whether the child had been infected with the virus or whether he had contact histories with confirmed cases, and if so, had the child developed any symptoms (such as fever, respiratory, digestive or osteoarticular symptoms, myalgia, asthenia) or required any specific care.

For all patients, we collected the following data: age, age of onset, the duration of the disease, JIA subtype, and the current treatment.

Results

We included 25 JIA patients, mean age at disease onset was 7.6 +/- 3.9 years [1-11]. Among them, 17 were female. The mean duration of the disease was 4.9 +/- 3 years [0-15]. Three patients were on biological disease-modifying anti-rheumatic drugs (bDMARDs) and six on conventional synthetic DMARDs (csDMARDs). Sixteen patients had no background treatment.

None of the children had a positive PCR test nor symptoms suggestive of Covid-19.

There were only 2 children with contact histories with confirmed cases: one with his cousin and one with his grandfather. Both patients were on NSAIDS with no DMARDs, and both followed social distancing rules. Neither one of them developed any symptoms.

There have been no reports of absenteeism from school or medical checkups or disruption of treatment due to this pandemic, outside of the government-imposed lockdown period.

Conclusion

None of our patients contracted the corona virus or developed any symptoms, during the deadliest wave in Tunisia to date. These results align with different research and the hypothesis that children with JIA under treatment do not have an increased susceptibility to COVID-19 compared with healthy children. Our study, however, had its limitations due to the small number of patients. Further research with larger sample size are, therefore, required.