Covid-19 lockdown: management of children with recurrent wheezing and asthma in Spain.

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#### Abstract

Introduction: The effect of lockdown measures due to COVID-19 pandemic in children with respiratory underlying conditions are still unclear. We analyzed the impact of lockdown measures in the management and evolution of children with asthma and preschool wheeze during the first wave of COVID-19. Matherial and Methods: observational study carried out in children with recurrent wheezing or asthma before and after the implementation of the lockdown by using: a questionnaire aimed to examine pre-existing respiratory disorders, step treatment (according to Spanish Guide for Asthma Management) and level of asthma control before/after lockdown (CAN questionnaire), COVID history and laboratory testing including IgG SARS-CoV-2. Results: we enrolled 475 asthmatic and preschool wheezers (60.6% males), mean age 5.6 years. There were not differences in asthma treatment comparing both periods, since 81.7% maintained the same treatment (p=0.103). According to CAN questionnaire 87.7% remained well controlled during confinement. Nearly a third of children (34.9%) needed reliever treatment, mainly in older children. Determination of IgG SARS-CoV-2 was performed in 233 children (49.1%) of whom 17 (7.3%) tested positive. Seven patients positive to IgG SARS-CoV-2 were assisted in the emergency department and two required hospital admission. Conclusions: During the COVID-19 lockdown most of the children with asthma and recurrent wheezing maintained their preventive treatments unchanged and remained well controlled from their underlying disease. Our results suggest that children that tested positive to IgG SARS-CoV-2 showed significant increase in paediatric hospital admissions and attendances to urgent care settings.

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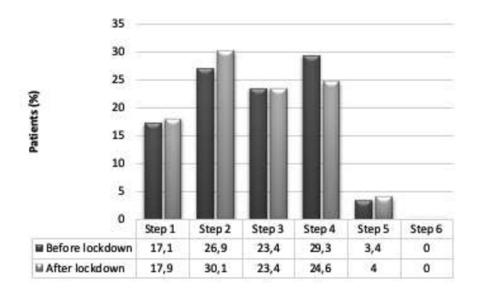
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