

# Foreign body aspiration in Israeli children during the COVID-19 pandemic

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## Abstract

Background: Since the outbreak of the Coronavirus disease 2019 (COVID-19) pandemic, there has been a decline in pediatric emergency department visits. Our aim was to assess the pattern of pediatric foreign body aspiration (FBA) during the first year of the COVID-19, in comparison to the prior years. Methods: In this retrospective multicenter study, we compared the number of children that presented with FBA during the COVID-19 year (March 1st, 2020 to February 28, 2021), to the annual average of the years 2016-2019. We also compared the lockdown periods to the post-lockdown periods and the percentage of missed FBA, proven FBA, and flexible bronchoscopy as the removal procedure. Results: 345 children with FBA from six centers were included, 276 in the pre-COVID-19 years (average 69 per year) and 69 in the COVID-19 year. There was no difference in the prevalence of FBA between the COVID-19 year and any of the prior four years. Examining the lockdown effect, the monthly incidence of FBA dropped from a pre-COVID-19 average of 5.75 cases to 5.1 cases during lockdown periods and increased to 6.3 cases in post-lockdown periods. No difference in the percentage of missed FB or proven FB was observed. There was a significant rise in the usage of flexible bronchoscopy as the removal procedure (Average of 15.4% vs 30.4%,  $p=0.001$ ) Conclusion: There was no difference in the prevalence of FBA during the COVID-19 year. However, there were fewer cases during lockdown periods, compared to post-lockdown periods, presumably related to better parental supervision.

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