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Multisystem inflammatory syndrome in children after vaccination against SARS-COV-2

Síndrome inflamatória multissistêmica em crianças após vacinação contra SARS-COV-2

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Bruno Souza Santana
Lattes: 2171407158080006
Post-Graduation in Higher Education Teaching from FAVENI SP
E-mail: rev.bsantana@hotmail.com

Stefanie Cristine Araujo Ferreira
Undergraduate student in Medicine, University Center of Votuporanga- UNIFEV
E-mail: stecristine98@hotmail.com

Maria Eduarda Almeida Lobo
Lattes: 0848037170220084
Undergraduate student in Medicine, Faculdade Metropolitana de Manaus - FAMETRO
E-mail: mariaeduarda.alobo@gmail.com

Lucas Moraes de Morais
ORCID: 0000-0002-4595-6108
Graduated in Nursing from Faculdade dos Carajás (2021)
Medical Student 5th period
E-mail: lucasmoraes806@gmail.com

Renata de Alencar Nogueira
LATTES: 2985149377635326
Undergraduate student in Medicine, Uninovafapi
E-mail: renataanogueira@yahoo.com.br

Ingrid Jordana Bernardes Ferreira
LATTES: 3431807909321703
Undergraduate student in medicine
E-mail: ingridjordanaa@gmail.com

ABSTRACT
COVID-19 in some children has caused severe consequences, such as multisystem inflammatory syndrome in children (MIS-C). Since December 2020, the mRNA vaccine against SARS-CoV-2 has been available with a good safety profile. However, evidence on safety and vaccination strategies in children with MIS-C is still lacking.

Keywords: COVID-19, Vaccination, Pediatrics.

1 INTRODUCTION

COVID-19 in some children has caused severe consequences, such as multisystem inflammatory syndrome in children (MIS-C). Since December 2020, the mRNA vaccine against SARS-CoV-2 has been available with a good safety profile. However, evidence on safety and vaccination strategies in children with MIS-C is still lacking.

2 OBJECTIVES

To address whether current COVID-19 vaccines have a protective effect on the development of MIS-C.

3 METHODS

This is an integrative review of the literature, researched studies from 2020 to 2023, written in English, with free access in the following databases: PubMed, Virtual Health Library and Google Scholar. The descriptors used were: multisystem inflammatory syndrome and covid 19 and vaccine. A total of 17 articles were included after the use of the filters.

4 RESULTS

In 14 (82.3%) studies, COVID-19 vaccination was found to be associated with reduced incidence of MIS-C, especially if 2 doses are administered. Vaccination offers protection against SARS-CoV-2 infection, putting fewer children and adolescents at risk of developing MIS-C. However, 3 (17,6) studies have reported vaccination as a potential trigger for MIS-C in pediatric patients, and additional surveillance is needed for these rare cases as an adverse event of COVID-19 vaccination.

5 CONCLUSION

Continuous evaluation of the evidence is needed to assess the changing epidemiological landscape and to provide a solid basis for medical guidance and clinical decision-making.

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