Selections from international journals

Nahla M. Heshmat
Professor of Pediatrics, Ain Shams University


Childhood asthma outcomes during the COVID-19 pandemic: Findings from the PeARL multinational cohort

Background: The interplay between COVID-19 pandemic and asthma in children is still unclear. We evaluated the impact of COVID-19 pandemic on childhood asthma outcomes. Methods: The PeARL multinational cohort included 1,054 children with asthma and 505 non-asthmatic children aged between 4 and 18 years from 25 pediatric departments, from 15 countries globally. We compared the frequency of acute respiratory and febrile presentations during the first wave of the COVID-19 pandemic between groups and with data available from the previous year. In children with asthma, we also compared current and historical disease control. Results: During the pandemic, children with asthma experienced fewer upper respiratory tract infections, episodes of pyrexia, emergency visits, hospital admissions, asthma attacks, and hospitalizations due to asthma, in comparison with the preceding year. Sixty-six percent of asthmatic children had improved asthma control while in 33% the improvement exceeded the minimal clinically important difference. Pre-bronchodilatation FEV1 and peak expiratory flow rate were improved during the pandemic. When compared to non-asthmatic controls, children with asthma were not at increased risk of LRTIs, episodes of pyrexia, emergency visits, or hospitalizations during the pandemic. However, an increased risk of URTIs emerged. Conclusion: Childhood asthma outcomes, including control, were improved during the first wave of the COVID-19 pandemic, probably because of reduced exposure to asthma triggers and increased treatment adherence. The decreased frequency of acute episodes does not support the notion that childhood asthma may be a risk factor for COVID-19. Furthermore, the potential for improving childhood asthma outcomes through environmental control becomes apparent.


Management of asthma in childhood: study protocol of a systematic evidence update by the Paediatric Asthma in Real Life (PeARL) Think Tank

Introduction: Clinical recommendations for childhood asthma are often based on data extrapolated from studies conducted in adults, despite significant differences in mechanisms and response to treatments. The Paediatric Asthma in Real Life (PeARL) Think Tank aspires to develop recommendations based on the best available evidence from studies in children. An overview of systematic reviews (SRs) on paediatric asthma maintenance
Food allergy treatment value: Child caregiver and patient perspectives
Moaz Abdelwadoud, Sanaz Eftekhari, Hannah Jaffee, Melanie Carver, T Joseph Mattingly 2nd

Background: Food allergy is a major health problem that significantly impacts quality of life (QoL). There is growing focus to evaluate food allergy-related QoL and treatment options’ value beyond the clinical effectiveness perspective by engaging patients and caregivers. We aimed to identify and prioritize outcomes important to food allergy parents of children and patients allergic to milk, egg, and/or peanut, to guide comparative effectiveness research (CER) that focuses on evaluating food allergy treatment decisions. Methods: We conducted a modified 3-round Delphi study to identify and derive consensus on priority treatment outcomes for parents of children and adult patients with diagnosed allergies to at least one of three major allergenic foods (milk, egg, and peanut) from across the United States. Results: Round 1 yielded 44 statements for round 2, and 39 statements reached the agreement level for round 3 ranking. Statements were organized under 4 sections: 1) food allergy problems, 2) treatment experiences, 3) important treatment outcomes, and 4) value of different treatment options. Conclusion: Food allergy parents and patients face several social, psychological, medical, healthcare, financial, food selection, and awareness challenges. The areas of consensus on important treatment outcomes revealed shared priority for reducing the risk of potentially fatal allergic reactions and having reliable treatments. The most valued treatment options reflect hope for permanent cure and fear of serious allergic reactions.