

Understanding brief resolved unexplained events in infants

January 4 2023, by Jessica Cerretani



Credit: Pixabay/CC0 Public Domain

Brief resolved unexplained events (BRUEs) are episodes marked by

concerning changes in breathing, consciousness, muscle tone, and skin color (cyanosis or paleness). They tend to occur in previously healthy infants and send worried parents racing to the emergency department. However, researchers know little about the risk of persistent symptoms after BRUE hospitalizations.

To learn more, Daniel Duncan, MD, MPH, and his colleagues in Boston Children's Aerodigestive Center conducted the first prospective longitudinal cohort study of infants hospitalized with BRUEs. They assessed 124 infants who were hospitalized at Boston Children's after a diagnosis of BRUE and followed up with their parents or caregivers after two months.

The team found that 86% of the babies still had symptoms after they were discharged: 65% had persistent choking episodes and 12% had recurrent BRUE spells. Overall, 15% returned to the hospital for related symptoms. Understandably, these ongoing symptoms led to high anxiety in about a third of the infants' parents and caregivers.

Little benefit from GERD diagnosis

Although [gastroesophageal reflux disease](#) (GERD) is frequently implicated in BRUEs, research suggests that oropharyngeal dysphagia with aspiration may also play a role. In the current study, Duncan and his colleagues also found that providing a diagnosis of GERD didn't result in decreased caregiver anxiety. What's more, patients treated with acid-suppressing medication didn't experience symptomatic improvement—and actually had higher rates of persistent symptoms.

However, infants given thickened liquids did see an improvement in symptoms, suggesting that underrecognized swallowing dysfunction might play a role in persistent symptoms after BRUE, and treating oropharyngeal dysphagia with thickening may work for some patients.

"These results suggest that current management strategies do not sufficiently address persistent symptoms after BRUE and the common practice of blaming reflux and using acid suppression medications really does not seem to be helpful," explains Duncan. "Our clinical takeaways from this study are that swallow dysfunction might be the key driver for many persistent symptoms after BRUE. Fortunately, thickening of feeds is a low-risk approach that has potential for improving these outcomes."

More information: Daniel R. Duncan et al, A Prospective Study of Brief Resolved Unexplained Events: Risk Factors for Persistent Symptoms, *Hospital Pediatrics* (2022). [DOI: 10.1542/hpeds.2022-006550](https://doi.org/10.1542/hpeds.2022-006550)

Provided by Children's Hospital Boston

Citation: Understanding brief resolved unexplained events in infants (2023, January 4) retrieved 7 May 2024 from <https://medicalxpress.com/news/2023-01-unexplained-events-infants.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
