

237 Improvement Of Anaphylaxis Diagnosis And Management In The Pediatric Population



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RATIONALE: Anaphylaxis is a life-threatening allergic reaction, and standard of care is prompt administration of epinephrine. Our quality improvement (QI) project sought to reduce the time to administration of intramuscular epinephrine by 20% in pediatric patients presenting to the emergency room (ER) and urgent care (UCC) facilities.

METHODS: The primary intervention was the implementation of a standardized pathway that detailed diagnostic criteria and a standardized treatment algorithm for anaphylaxis. The subsequent intervention, cycle 2, focused on raising awareness of the pathway through coordination with ER staff and resident physicians. Pre-intervention analysis included review of 100 charts at a single institution and its affiliated UCCs from August 2021 to May 2022. Cycle 1 consisted of chart review of 47 patients from August 2022 to January 2023. Cycle 2 consisted of chart review of 24 patients from March 2023 to May 2023. Presentation time was defined by the completion of triage. Additionally, the utilization of adjuvant therapies including steroids, diphenhydramine, famotidine, and albuterol was documented.

RESULTS: Pre-pathway data demonstrated an average intramuscular epinephrine administration time of 56.19 minutes. Cycle 1 and cycle 2 revealed average times of 37.37 minutes and 28.69 minutes respectively. This demonstrates an improvement of 33.5% after cycle 1 and 48.9% after cycle 2 when compared to pre-intervention data. The most common adjuvant therapy was steroids, utilized in greater than 72% of all patients.

CONCLUSIONS: By implementing standardized protocols, decreased time to administration of intramuscular epinephrine may improve the clinical course of patients presenting with anaphylaxis.

238 Estimating the burden of Hereditary Angioedema in Colombia using data from the National Health Registry from 2019 to 2023



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RATIONALE: The use of national claims data has proven to be a useful tool for estimating the epidemiological behavior of different pathologies. Our objective was to estimate the burden of the disease in terms of the frequency of cases and use of medications for hereditary angioedema (HAE) in Colombia.

METHODS: This was a descriptive epidemiological study employing the ICD10 code D841 (code for HAE in the national list of orphan diseases) as the search term in the Integral Information System of Social Protection (SISPRO) database from January 2019 to May 2023. We determined the frequencies of cases, on-demand medication usage, and long-term prophylaxis (LTP) using lanadelumab.

RESULTS: We identified a total of 835 entries with the code D841. Of these 652 had a prescription for treatment on demand or lanadelumab, which constituted the estimated cases, and that for a population of 52,215,503 assumes a prevalence of 1 in 80,085 inhabitants. All estimated cases had a prescription for on-demand treatment. 20.4% (n=133) had a prescription for lanadelumab. The entry of lanadelumab-based LTP did not affect the on-demand therapy prescription rate.

CONCLUSIONS: These findings raise an alarm regarding the underdiagnosis of hereditary angioedema in Colombia, thus highlighting the importance of improving disease awareness in the medical community to subvert this situation. 1 in 5 patients with HAE required LTP. Growing

economies like ours must evaluate the cost-effectiveness of these therapies to guarantee adequate access to them.

239 Anaphylaxis Triggers from an Emergency Physician's Perspective: Do We Need Risk Stratifying Guidelines?



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RATIONALE: Anaphylaxis is a severe allergic reaction that can arise from various triggers like food, medications, insect stings, and latex. Due to its diverse triggers and symptoms, emergency physicians (EPs) face challenges in determining consistent observation and treatment plans. We hypothesize that EPs rely on clinical intuition due to no risk stratifying guidelines and as a result, there are wide variations to perception of anaphylaxis triggers and treatment plans.

METHODS: A survey was conducted with 892 EPs in Kansas via the RedCap platform. The survey focused on anaphylaxis triggers and symptom combinations, aiming to discern patterns in EPs' perceptions.

RESULTS: Results were reported as how often anaphylaxis triggers were ranked as number one in severity in the follow order: food (36), insect stings (24), medications (23), idiopathic (11), radiocontrast agents (7), environment (3), latex (2), inhalants (1), alcohol (1), and vaccines (0). The most concerning symptom combinations were cutaneous and hypotension (66), cutaneous with respiratory (61), and cutaneous with gastrointestinal (2) symptoms.

CONCLUSIONS: This study highlights a discernible pattern: food, insect stings, and medications posed the greatest threat, suggesting EPs unconsciously prioritize these triggers. This may reflect an intuitive, unwritten stratification guiding decision-making. However, whether this approach stems from data or dogma remains uncertain. To address variability in practice and optimize care, we propose the need for clear guidelines and protocols for observation time based on risk stratification. Such guidelines could harmonize clinical decisions and enhance standardized patient care.

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