

# Real World Management of Anaphylaxis Versus the NICE Guidelines

Iman Nasr<sup>1</sup>, Asmaa Mahdi<sup>1</sup>, Humaid Al Wahshi<sup>1</sup>, Ikram Nasr<sup>2</sup>, Saad Al Juma<sup>1</sup>, Latifa Alshekaili<sup>3</sup>, Ibrahim Al Zakwani<sup>4</sup>, and Issa Al Salmi<sup>1</sup>

<sup>1</sup>The Royal Hospital

<sup>2</sup>Guy's and St Thomas' Hospitals NHS Trust

<sup>3</sup>King Faisal Hospital and Research Center

<sup>4</sup>Sultan Qaboos University College of Medicine and Health Science

January 30, 2024

## Abstract

**Objectives:** Anaphylaxis is an acute, life-threatening allergic reaction involving multiple systems caused by the sudden release of mediators from mast cells. This study aims to assess the current practice of emergency management of adults and children diagnosed with anaphylaxis at the Royal Hospital, against the recommendations of the National Institute for Health and Clinical Excellence (NICE) guidelines. **Methods:** This is an observational study of all anaphylaxis cases which took place at the emergency department (ED) during a 5-year period. **Results:** Of 100 patients with a preliminary diagnosis of anaphylaxis, 49% were true-anaphylaxis cases based on the WAO definition. All the 49-patients with true-anaphylaxis received adrenaline intramuscularly at ED. 24 (48.9%) of them were referred to an immunologist: 8/24 (33.3%) were adults and 16/24 (66.6%) were children. 16-children were admitted, seen by an immunologist and received an adrenaline autoinjector when indicated. 25 of the 33 adult patients (75.7%) were discharged from the ED with no onward referral to a specialist. None of the adult patients received an adrenaline autoinjector prior to discharge from ED and no one had a tryptase level checked. **Conclusion:** The paediatric emergency department fulfilled all the criteria for anaphylaxis management in accordance with NICE guidelines except for measuring serum tryptase where appropriate. By contrast, the adult patients were discharged from ED without an adrenaline autoinjector as an interim measure until seen by an allergist or immunologist. Therefore, education is the best strategy to improve the management of this severe and possible fatal condition.

## Hosted file

Real World Management of Anaphylaxis Versus the NICE Guidelines Manuscripts with tables and figures.docx available at <https://authorea.com/users/726286/articles/708884-real-world-management-of-anaphylaxis-versus-the-nice-guidelines>