



EVALUATION OF ANAPHYLAXIS PATIENTS APPLYING TO THE EMERGENCY DEPARTMENT

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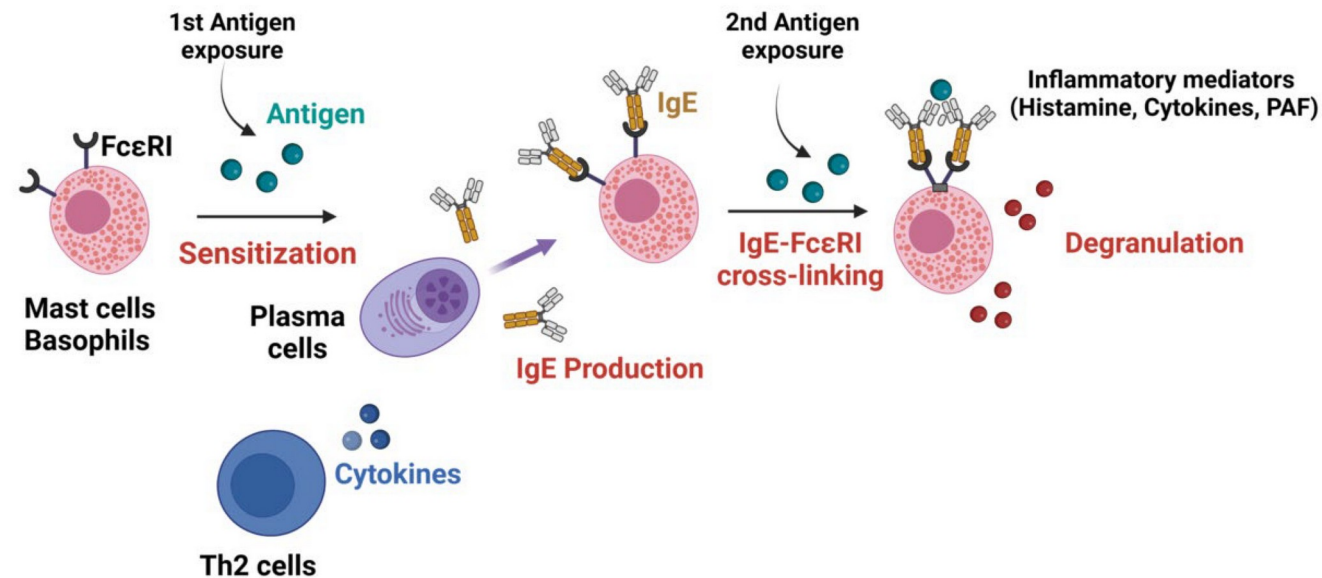
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INTRODUCTION

- Anaphylaxis is a life-threatening systemic hypersensitivity reaction which can develop within minutes and, if not promptly treated, can result in death.
- The World Allergy Organization (WAO) has classified anaphylaxis into allergic and non-allergic categories based on its mechanism of occurrence.

INTRODUCTION

- According to this classification, anaphylaxis is termed immunologic if it occurs via IgE, IgG, or immune complex-complement pathways, and non-immunologic if it arises from mechanisms not involving immunological pathways.



Affected Organ Systems



Skin or mucous membranes

- Flushing , erythema
- Urticaria , pruritus
- Swelling of the eyelids, angioedema



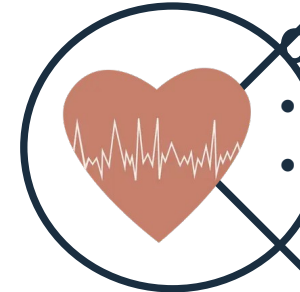
Gastrointestinal

- Nausea, vomiting (especially in food allergies)
- Abdominal pain, diarrhea



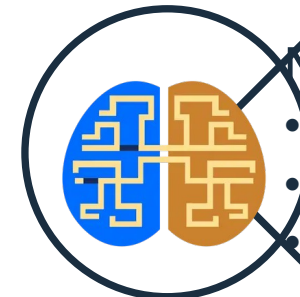
Respiratory

- Cough, hoarseness
- Chest tightness
- Dyspnea (due to bronchospasm or laryngeal edema), tachypnea
- Stridor, wheezing



Cardiovascular

- Hypotension
- Tachycardia, weak peripheral pulses

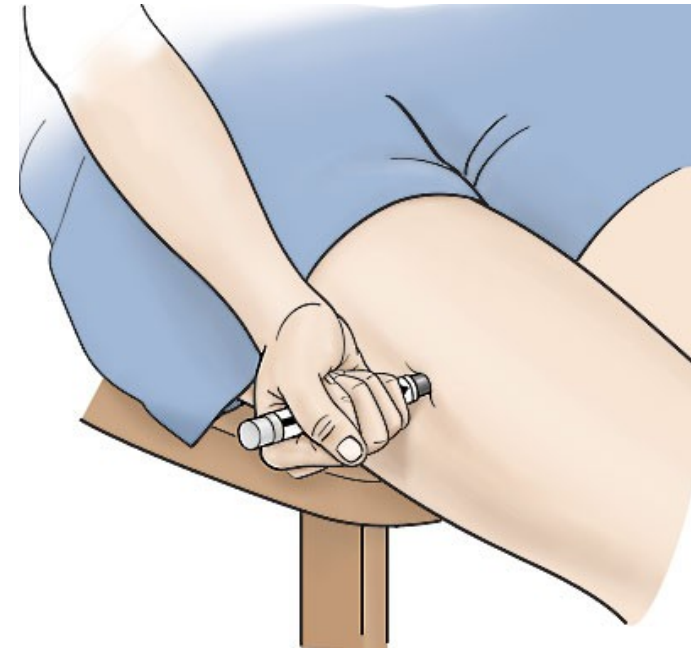


Neurological

- Headache
- Dizziness
- Blurred vision

Ethiology and Treatment

- Etiologically, it involves foods, drugs, insect stings, enzymes, and allergen immunotherapy. Treatment includes adrenaline, intravenous fluid injection, oxygen support, inhaled β -2 agonists, H1 antagonists, and corticosteroids.



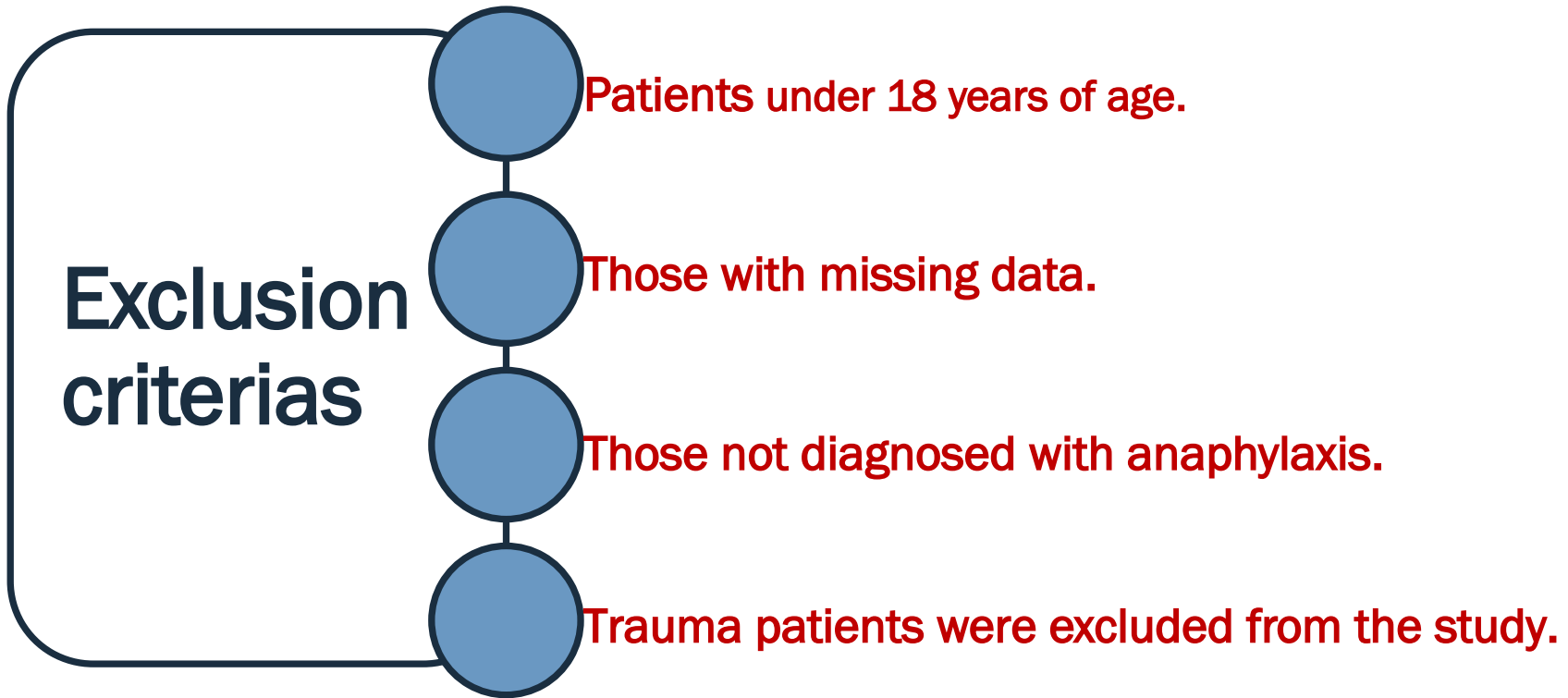
PURPOSE

- The aim of our study is to evaluate patients presenting to the Emergency Department with anaphylaxis. The goal is to increase awareness about anaphylaxis and to provide assistance to patients and physicians in approaching anaphylactic patients.

METHOD

- This study was conducted retrospectively in accordance with the Helsinki criteria after obtaining approval from the ethics committee. Patients aged 18 and over within the period from January 1, 2018, to December 31, 2022, were examined at the Emergency Department of Bezmiâlem Vakıf University Faculty of Medicine Hospital.
- The diagnosis of anaphylaxis was made according to the National Institute of Allergy and Infectious Disease 2021 guidelines.

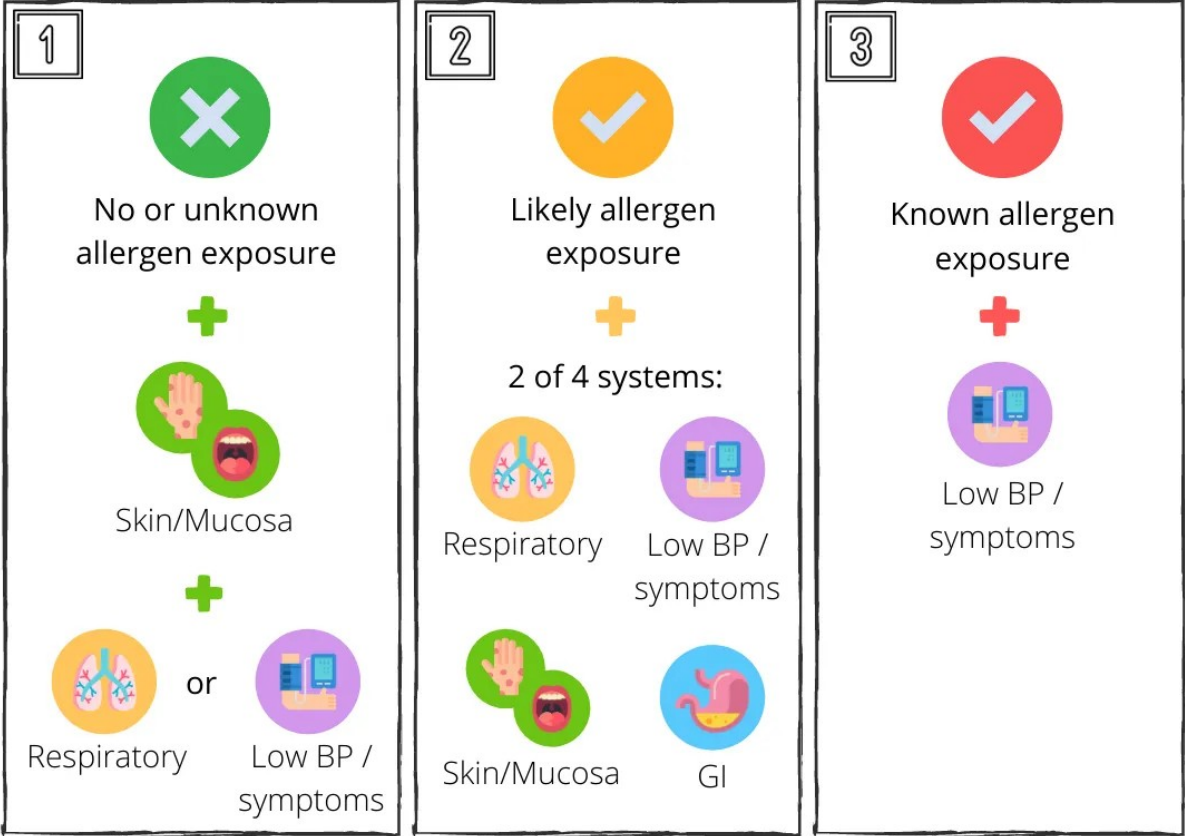
METHOD



METHOD

- Initial treatment involved intramuscular adrenaline with infusion therapy for unresponsive cases. Patient data were recorded for demographics, comorbidities, consciousness, and examination findings.
- The data were analyzed using IBM SPSS Statistics 22.0 software package. T-test was used to examine the mean differences between groups for continuous variables, while chi-square test was employed to assess the distribution of categorical variables across groups. Descriptive statistics including mean, standard deviation (r correlation coefficient), frequency, and percentage values were reported.

Anaphylaxis is likely when any of these 3 scenarios are met:



RESULTS

	Intramuscular N(%)	Infusion N(%)	p
Number of patients	68 (88,4)	9 (11,6)	
Female	37 (54,4)	6 (66,7)	
Male	31 (45,6)	3 (33,3)	
Age	49,28±1,56	55±5,34	0,09
Reason (unknown/drugs)	35 (51,5)	4 (44,4)	0,03
Comorbidity	25 (36,8)	8 (88,9)	0,04
Neurological symptoms	4 (5,9)	6 (66,8)	<0,001
Biphasic	6 (8,8)	0	0,004
Duration (shorter than 1 hour)	52 (76,5)	5 (55,6)	0,01

	Intramuscular N(%)	Infusion N(%)	p
In-hospital admission	57 (83,8)	6 (66,7)	0,340
Dermatological symptoms	53 (77,9)	7 (77,8)	1,00
Respiratory Symptoms	54 (79,4)	8 (88,9)	0,680
Cardiovascular symptoms	43 (63,2)	8 (88,9)	0,259
GI symptoms	15 (22,1)	2 (22,2)	1,00
Intubation	0	3 (33,3)	0,001
ICU	8 (10,4)	6 (66,7)	0,01

Limitations

- Low number of patients.

Powerful sides

- There is not much study on the treatment of anaphylaxis
- The new guideline suggests giving adrenaline earlier through infusion, which aligns with the research question of this study.

CONCLUSION

- If initial intramuscular injections are insufficient, initiating infusion therapy is recommended for a more stable response, particularly in patients with neurological symptoms and patients with comorbidities.
- Monitoring comorbidities is crucial due to their increased anaphylaxis risk.
- The absence of biphasic reactions in patients receiving infusion therapy is important for disease monitoring.

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