

ANAFILAXI

GUIA, PROTOCOL D'ABORDATGE I CRITERIS DE DERIVACIÓ

Definició anafilaxi

Segons l'Acadèmia Europea d'Al·lèrgia i Immunologia Clínica, l'anafilaxi es defineix com una reacció d'hipersensibilitat sistèmica i greu, de risc vital. que progressa ràpidament i pot portar a la mort, en la qual el sistema immunitari respon a substàncies que d'altra banda serien inofensives.

L'anafilaxi és una reacció al·lèrgica greu d'instauració ràpida i potencialment mortal. Es tracta d'una emergència mèdica que tots els professionals sanitaris haurien de conèixer.

Epidemiologia

- Increment en la prevalença d'anafilaxi a la població espanyola i europea.

Sociedad Española de Alergología e Inmunología Clínica. Alergologica 2005: Factores epidemiológicos, clínicos y socioeconómicos de las enfermedades alérgicas en España. Madrid:Luzán 5 S.A. de Ediciones, 2006.

- Incidència 3,2–30 /100000 persones any, amb mortalitat entre 0,05% i 2% del total de les reaccions.
- USA: 100000 reaccions/any, 1% mortals.
- Xoc anafilàctic: 3,2–10 /100000 persones/any, 6% de mortalitat.

REVIEW ARTICLE

The epidemiology of anaphylaxis in Europe: a systematic review

S. S. Panesar¹, S. Javad², D. de Silva³, B. I. Nwaru⁴, L. Hickstein⁵, A. Muraro⁶, G. Roberts^{7,8,9}, M. Worm¹⁰, M. B. Bilò¹¹, V. Cardona¹², A. E. J. Dubois¹³, A. Dunn Galvin¹⁴, P. Eigenmann¹⁵, M. Fernandez-Rivas¹⁶, S. Halken¹⁷, G. Lack¹⁸, B. Niggemann¹⁹, A. F. Santos^{20,21,22}, B. J. Vlieg-Boerstra²³, Z. Q. Zolkipli^{8,9} & A. Sheikh^{1,24} on behalf of the EAACI Food Allergy and Anaphylaxis Group*

Abstract

Background: Anaphylaxis is an acute, potentially fatal, multi-organ system, allergic reaction caused by the release of chemical mediators from mast cells and basophils. Uncertainty exists around epidemiological measures of incidence and prevalence, risk factors, risk of recurrence, and death due to anaphylaxis. This systematic review aimed to (1) understand and describe the epidemiology of anaphylaxis and (2) describe how these characteristics vary by person, place, and time.

Methods: Using a highly sensitive search strategy, we identified systematic reviews of epidemiological studies, descriptive and analytical epidemiological investigations, and studies involving analysis of routine data.

Results: Our searches identified a total of 5 843 potentially eligible studies, of which 49 satisfied our inclusion criteria. Of these, three were suitable for pooled estimates of prevalence. The incidence rates for all-cause anaphylaxis ranged from 1.5 to 7.9 per 100 000 person-years. These data indicated that an estimated 0.3% (95% CI 0.1–0.5) of the population experience anaphylaxis at some point in their lives. Food, drugs, stinging insects, and latex were the most commonly identified triggers.

Conclusions: Anaphylaxis is a common problem, affecting an estimated 1 in 300 of the European population at some time in their lives. Future research needs to

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1/300 europeus

Clinical and Experimental Allergy, 2000, Volume 30, pages 1144–1150

Lessons for management of anaphylaxis from a study of fatal reactions

R. S. H. PUMPHREY

Immunology Unit, Central Manchester Healthcare NHS Trust Hospitals, St Mary's Hospital, Hathersage Road, Manchester M13 0JH, UK

Results Approximately half the 20 fatal reactions recorded each year in the UK were iatrogenic, and a quarter each due to food or insect venom. All fatal reactions thought to have been due to food caused difficulty breathing that in 86% led to respiratory arrest; shock was more common in iatrogenic and venom reactions. The median time to respiratory or cardiac arrest was 30 min for foods, 15 min for venom and 5 min for iatrogenic reactions. Twenty-eight per cent of fatal cases were resuscitated but died 3 h–30 days later, mostly from hypoxic brain damage. Adrenaline (epinephrine) was used in treatment of 62% of fatal reactions but before arrest in only 14%.

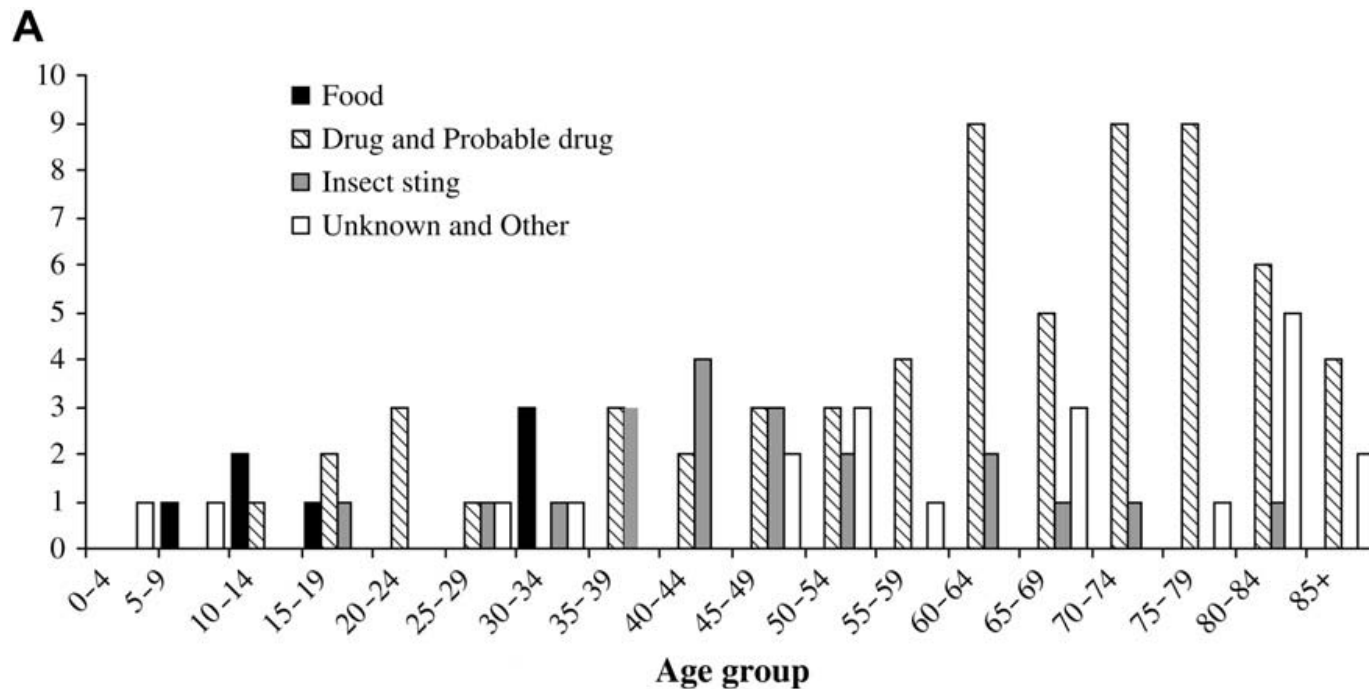
The register holds details of 164 fatalities during 1992–98



Anaphylaxis fatalities and admissions in Australia

Woei Kang Liew, MBBS, MRCPCH, FAMS,^{a,b} Elizabeth Williamson, MSc, PhD,^{c,d} and Mimi L. K. Tang, MBBS, PhD, FRACP, FRCPA^{a,d,e} Melbourne, Australia, and Singapore

FIG 1. Causes of anaphylaxis deaths. There were 112 deaths between 1997 and 2005 in Australia. Causes are shown.





Academia Europea de Alergia e
Immunología Clínica (EAACI)



Declaración Pública sobre la Alergia a los Alimentos y la Anafilaxia

Resumen ejecutivo

La EAACI se propone llamar la atención sobre el aumento abrupto de la anafilaxia, especialmente en los niños.

La alergia a los alimentos es un problema de salud pública en auge que afecta a más de **17 millones de personas sólo en Europa. Tres millones y medio de los europeos que la padecen son menores de 25 años** y el aumento más abrupto de las alergias alimentarias **ocurre en los niños y la gente joven. Además, el número de reacciones alérgicas graves y que potencialmente amenazan la vida (anafilaxia) debidas a la alergia a los alimentos y que ocurren en los niños también está aumentando.**

A la vista de estos preocupantes datos estadísticos, la **Academia Europea de Alergia e Inmunología Clínica (EAACI) lanzó la "Campaña Alergia a los Alimentos. ¡Stop a la anafilaxia!"** en junio de 2012. El objetivo de la campaña es **llamar la atención sobre el abrupto incremento de la anafilaxia, especialmente en los niños.** Se propone educar al público para reconocer los síntomas de la anafilaxia y sus desencadenantes y **explicar cómo reaccionar en caso de emergencia.** El Comité de Organizaciones de Pacientes de la EAACI también apoya la Campaña de Alergia a los Alimentos, con más de 25 representantes de países de Europa, Norteamérica, Suramérica, Oriente Medio, Asia y Oceanía. Este documento es un elemento clave de la campaña puesto que contiene **una declaración pública de petición a los políticos de la Unión Europea (UE), los profesionales sanitarios y el público de adoptar las acciones concretas que mejoren el manejo y el tratamiento de las alergias alimentarias y la anafilaxia.**

Unas guías europeas basadas en las pruebas científicas para los profesionales sanitarios junto con una mejor formación de los profesionales sanitarios en el diagnóstico de las alergias alimentarias podrían mejorar la situación actual. Es notable que, en la actualidad, la mayor parte de las alergias a los alimentos esté sin diagnosticar o quede a la merced de métodos de auto-ayuda, no supervisados por un profesional médico. El establecer **una normativa clara de etiquetado de los alérgenos en alimentos procesados** disminuiría el riesgo de reacciones alérgicas en aquellas personas que padecen una alergia alimentaria. Un mejor acceso al tratamiento de emergencia en los espacios públicos salvaría vidas. Esto es particularmente cierto en los alérgicos a alimentos más jóvenes que experimentan cada vez más reacciones que amenazan sus vidas (anafilaxia). La EAACI pide que **los auto-inyectores estén disponibles en los colegios:** una solución sencilla que podría salvar vidas. La EAACI publicará los **Estándares Mínimos para el tratamiento del niño alérgico en la escuela** para guiar a los políticos en la implantación de tal cambio de política.

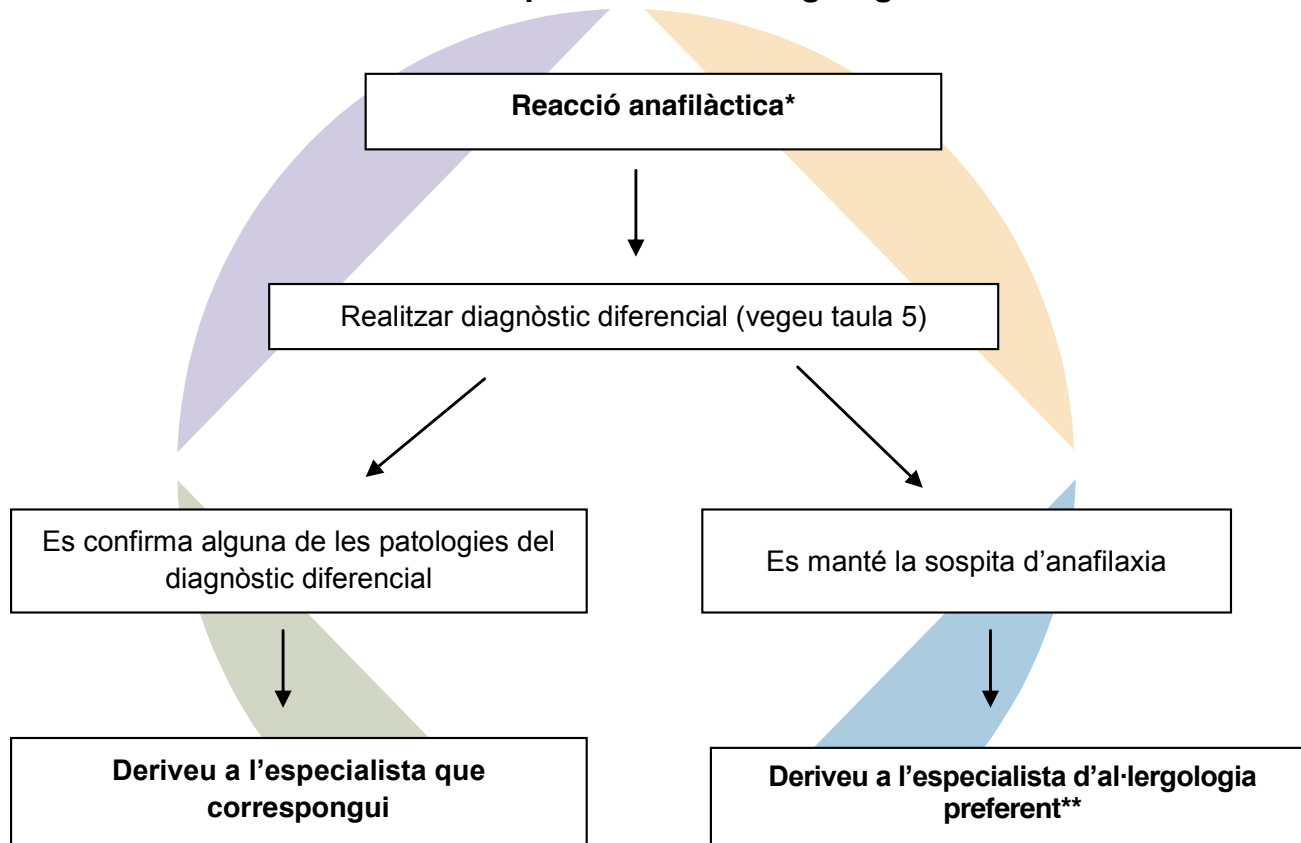
Se necesita muchas más investigación para ayudar a desarrollar estrategias de prevención y tratamiento y para mejorar la salud y la calidad de vida de los alérgicos a los alimentos. **Los programas de investigación financiados por la UE deberían por tanto seguir apoyando el trabajo sobre las alergias alimentarias** y aportar al mercado herramientas de diagnóstico y tratamiento más eficaces. La EAACI también apoya la inclusión de la anafilaxia como una causa de muerte en la Clasificación internacional de las enfermedades (ICD-11) y la creación de registros nacionales y europeos de alergia y anafilaxia, los cuales permitirían generar unos datos de mejor calidad y ayudar a desarrollar un abordaje escalonado para un mejor tratamiento de estas afecciones.

Juny 2012



Les guies, els protocols d'abordatge de la patologia al·lèrgica i els criteris de derivació en l'atenció primària

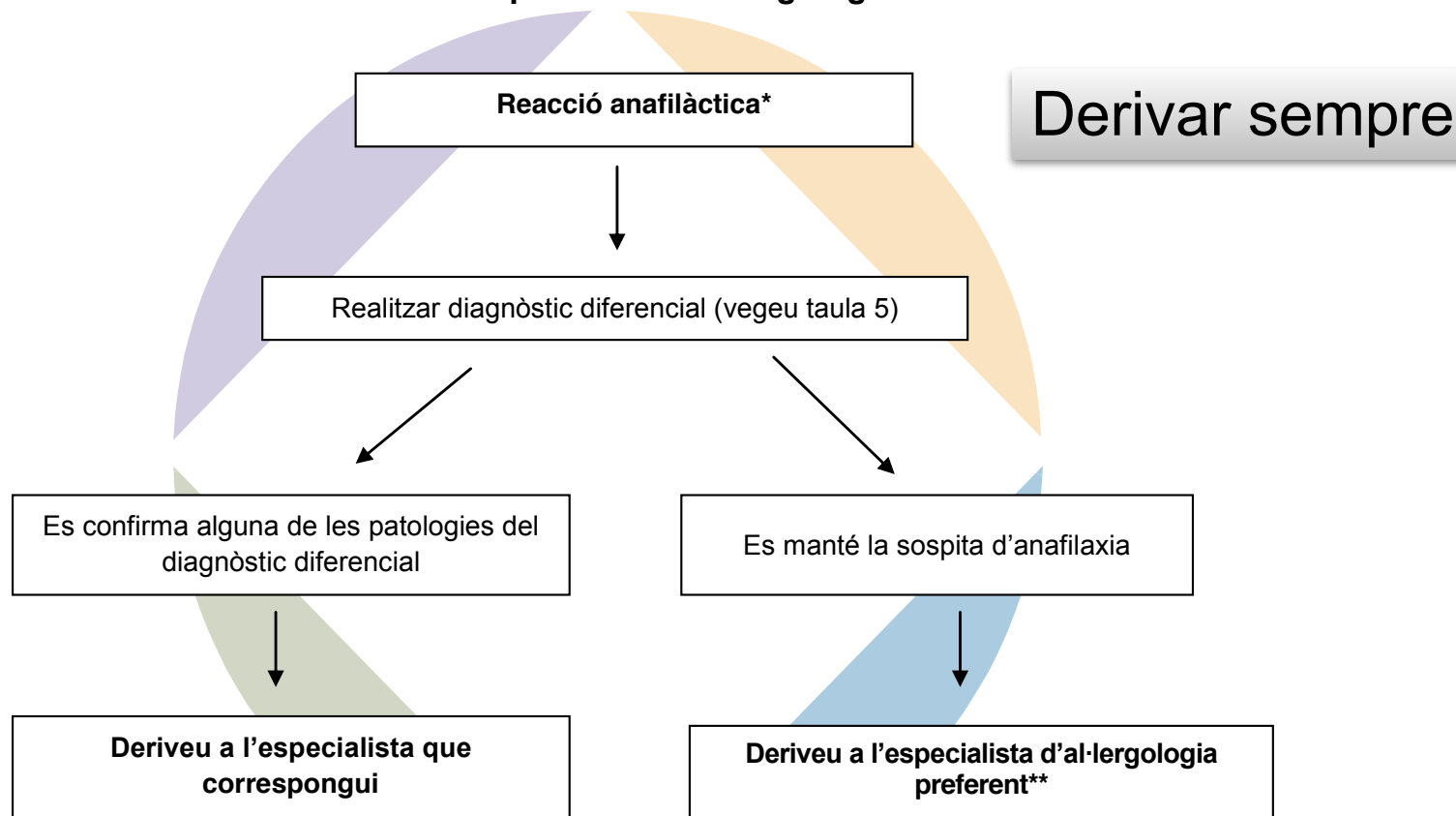
6.7 Criteris de derivació a l'especialista d'al·lergologia



* Intenteu identificar possibles causes: fàrmacs, picades himenòpters, aliments, exercici, etc.

** Indicació d'adrenalina autoinjectable des d'atenció primària

6.7 Criteris de derivació a l'especialista d'al·lergologia



* Intenteu identificar possibles causes: fàrmacs, picades himenòpters, aliments, exercici, etc.

** Indicació d'adrenalina autoinjectable des d'atenció primària

Diagnòstic diferencial

Reaccions vasovagals

Altres formes de xoc (sèptic, cardiogènic, hipovolèmic, hemorràgic)

Síndromes que cursen amb *flushing*:

carcinoide

postmenopàusica

induïts per alcohol

carcinoma medul·lar de tiroides

epilèpsia

VIPomes

Malalties que cursen amb excés de producció d'histamina:

Mastocitosi

Urticària pigmentosa

Leucèmia

Diagnòstic diferencial

Infart agut de miocardi. Accident vascular cerebral

Dèficit de C1 inhibidor hereditari o adquirit

Angioedema per IECA. Síndrome d'hiperpermeabilitat capil·lar generalitzat

Asma

Embolisme pulmonar agut

Laringospasme

Disfunció de cordes vocals

Escombroidosi

Síndrome del restaurant xinès

Síndrome de l'home vermell

Malaltia del sèrum

Feocromocitoma

Patologia psiquiàtrica (crisi de pànic, etc.)

Cartera de serveis en l'atenció a la patologia al·lèrgica

Motius de consulta	Atenció primària (MFC/Ped)	Al·lèrgologia*	Pneumologia*	Otorinolaringologia* (ORL)	Dermatologia*	Altres àrees assistencials*	Proves complementàries protocol·litzades
Al·lèrgia a fàrmacs	-Sospita D -Criteris de derivació i prioritització	-D/T <hr/> <i>Nivell superior:</i> - D: Proves complexes -T: Dessensibilització			- D/T	-Immunologia: D -Interconsulta hospitalària: D	-En cas d'anafilaxi: determinació de corba de triptasa sèrica -En cas d'angioedema recidivant sense urticària: determinació C3, C4 i CH50 en sèrum
Urticària: • Urticària aguda /angioedema amb sospita de desencadenant al·lèrgic • Urticària/angioedema recidivants o crònics	-Urticària lleu: Sospita D/T/S -Criteris de derivació i prioritització	- D/T/S <hr/> <i>Nivell superior:</i> -Angioedema hereditari: D/T/S -Urticària crònica greu: D/T/S			- D/T/S	-Immunologia: D -Medicina interna: D/T/S -Urgències: D/ T	-En cas d'angioedema recidivant sense urticària: determinació C3, C4 i CH50 en sèrum -En urticària recidivant o crònica: analítica protocol
Anafilaxi	-Sospita D -Criteris de derivació i prioritització/S	-D/T/S -D diferencial <hr/> <i>Nivell superior:</i> - Mastocitosis sistèmica: D/T/S			- D/T/S sospita mastocitosis cutània	-Urgències: D/T -Hematologia: D/T/S sospita mastocitosis	-Determinació de corba de triptasa sèrica
Al·lèrgia a verí d'himenòpters	-Sospita/D -Criteris de derivació i prioritització/S	-D/T/S -D diferencial <hr/> <i>Nivell superior:</i> -D: Repicada			- D/T/S sospita mastocitosis cutània	-Urgències: D/T -Hematologia: D/T/S sospita mastocitosis	-En cas d'anafilaxi: determinació de corba de triptasa sèrica

Epinephrine: The Drug of Choice for Anaphylaxis—A Statement of the World Allergy Organization

*Stephen F. Kemp, Richard F. Lockey, F. Estelle R. Simons,
on behalf of the World Allergy Organization ad hoc Committee on Epinephrine in Anaphylaxis*

Abstract: Anaphylaxis is an acute and potentially lethal multisystem allergic reaction. Most consensus guidelines for the past 30 years have held that epinephrine is the drug of choice and the first drug that should be administered in acute anaphylaxis. Some state that properly administered epinephrine has no absolute contraindication in this clinical setting. A committee of anaphylaxis experts assembled by the World Allergy Organization has examined the evidence from the medical literature concerning the appropriate use of epinephrine for anaphylaxis. The committee strongly believes that epinephrine is currently underused and often dosed suboptimally to treat anaphylaxis, is underprescribed for potential future self-administration, that most of the reasons proposed to withhold its clinical use are flawed and that the therapeutic benefits of epinephrine exceed the risk when given in appropriate intramuscular doses.

Key Words: anaphylaxis, epinephrine, management, prevention

(*WAO Journal* 2008;S18–S26)

Management of anaphylaxis: a systematic review

S. Dhimi¹, S. S. Panesar², G. Roberts^{3,4,5}, A. Muraro⁶, M. Worm⁷, M. B. Bilò⁸, V. Cardona⁹, A. E. J. Dubois¹⁰, A. DunnGalvin¹¹, P. Eigenmann¹², M. Fernandez-Rivas¹³, S. Halcken¹⁴, G. Lack^{15,16}, B. Niggemann¹⁷, F. Rueff¹⁸, A. F. Santos^{15,16,19}, B. Vlieg-Boerstra²⁰, Z. Q. Zolkipli^{3,4} & A. Sheikh^{2,21} on behalf of the EAACI Food Allergy and Anaphylaxis Guidelines Group*

Abstract

To establish the effectiveness of interventions for the acute and long-term management of anaphylaxis, seven databases were searched for systematic reviews, randomized controlled trials, quasi-randomized controlled trials, controlled clinical trials, controlled before–after studies and interrupted time series and – only in relation to adrenaline – case series investigating the effectiveness of interventions in managing anaphylaxis. Fifty-five studies satisfied the inclusion criteria. We found no robust studies investigating the effectiveness of adrenaline (epinephrine), H1-antihistamines, systemic glucocorticosteroids or methylxanthines to manage anaphylaxis. There was evidence regarding the optimum route, site and dose of administration of adrenaline from trials studying people with a history of anaphylaxis. This suggested that administration of intramuscular adrenaline into the middle of vastus lateralis muscle is the optimum treatment. Furthermore, fatality register studies have suggested that a failure or delay in administration of adrenaline may increase the risk of death. The main long-term management interventions studied were anaphylaxis management plans and allergen-specific immunotherapy. Management plans may reduce the risk of further reactions, but these studies were at high risk of bias. Venom immunotherapy may reduce the incidence of systemic reactions in those with a history of venom-triggered anaphylaxis.

Box 1: Key recommendations

- There is some evidence that prompt administration of adrenaline may be life-saving; it should therefore be used as the drug of first choice in the acute management of anaphylaxis.
- Adrenaline should be administered by the intramuscular route into the anterolateral aspect of the mid-thigh.
- Anaphylaxis management plans may reduce the severity of subsequent reactions.
- VIT may reduce the severity of subsequent reactions and improve quality of life, but cost-effectiveness considerations should be considered, particularly in those at low risk of further stings.
- Adrenaline used prophylactically can reduce severe adverse effects associated with anti-snake venom administration.

WAO POSITION PAPER

World Allergy Organization Guidelines for the Assessment and Management of Anaphylaxis

F. Estelle R. Simons, MD, FRCPC,¹ Ledit R. F. Arduzzo, MD,² M. Beatrice Bilò, MD,³ Yehia M. El-Gamal, MD, PhD,⁴ Dennis K. Ledford, MD,⁵ Johannes Ring, MD, PhD,⁶ Mario Sanchez-Borges, MD,⁷ Gian Enrico Senna, MD,⁸ Aziz Sheikh, MD, FRCGP, FRCP,⁹ and Bernard Y. Thong, MD,¹⁰ for the World Allergy Organization

Review

International Archives of
**Allergy and
Immunology**

Int Arch Allergy Immunol 2013;162:193–204
DOI: [10.1159/000354543](https://doi.org/10.1159/000354543)

Published online: September 5, 2013

World Allergy Organization Anaphylaxis Guidelines: 2013 Update of the Evidence Base

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Dèficits en diagnòstic i tractament

REVIEW ARTICLE

Gaps in anaphylaxis management at the level of physicians, patients, and the community: a systematic review of the literature

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Abstract

Allergy 2010. 65, 435-444.

Diagnosis and management of anaphylaxis can be a challenge because reactions are often unexpected and progress quickly. The focus of anaphylaxis management has mostly been on the acute episode, with little attention given to the long-term management of patients at risk. This is compounded by conflicting information in current guidelines and a general lack of agreement among clinicians about which management strategies are the most appropriate. We systematically reviewed the literature to identify and summarize studies that investigated gaps in anaphylaxis management. Our search included MEDLINE, EMBASE, CINAHL, and Evidence-Based Medicine Reviews. Studies were included if they addressed an outcome describing gaps in anaphylaxis knowledge, education, anaphylaxis management, and quality of life (QOL). Populations of interest were health care professionals involved in the care of patients at risk for anaphylaxis, and patients of any age, their parents, caregivers, and teachers in primary care, hospital or community settings. Of 5014 citations that were identified, the final 59 studies (selected from 75 full-text articles) met the inclusion criteria. Two hundred and two gaps were identified and classified according to major themes: gaps in knowledge and anaphylaxis management (physicians and patients); gaps in follow-up care (physicians); and QOL of patients and caregivers. Findings from this systematic review revealed gaps in anaphylaxis management at the level of physicians, patients, and the community. Findings will be used to provide a basis for developing interventional strategies to help address these deficiencies.

Table 1 Summary of anaphylaxis management gaps at the level of physicians

Theme	Gap (<i>number of gaps</i>)	Setting
Lack of knowledge	Anaphylaxis	
	The signs and symptoms or to correctly diagnose (3)	Army hospital database, US (43); Pediatric allergy hospital, UK (49); AAP organization, US (51)
	Auto-injectors	
	How to use (8)	Community hospitals, UK (11); Pediatric medical convention, Canada (41); Tertiary pediatric hospital, Australia (59); Pediatric hospital allergy clinic, US (68); Hospital, New Zealand (72)
	Correct dose (6)	Schools, UK (28); ED, UK (40); Pediatric convention, Canada (41); General hospitals, UK (47); Hospital, New Zealand (72)
Anaphylaxis management	Appropriate route of administration (6)	AAAAI members, US (27); ED, UK (40); Army hospital database, US (43); General hospitals, UK (47); Pediatric and general practice, Germany (58); Hospital, New Zealand (72)
	Inadequate or no training provided to patients on how to use (12)	Communities, UK (1); Community hospitals, UK (11); Specialist pediatric allergy clinic, UK (21); FAAN organization, US (25); Schools, UK (32); Army hospital database, US (43); Pediatric allergy clinic, UK (49); Support group and pediatric allergy clinic, US (50); Tertiary pediatric hospital, Australia (59); Children's hospital, France (63)
	Treatment with epinephrine	
Follow-up care	Infrequent (8)	Independent childcare centers, US (24); EDs, US (31, 37); ED, UK (40); Army hospital database, US (43); Support group and pediatric allergy clinic, US (50); AAP members, US (51); Allergy clinic, France (60)
	Delayed administration (5)	Communities, UK (1); AAAAI members, US (27); Data from communities of a national registry, US (29); ED, Australia (33); Children's hospital, US (52)
	Diagnostic coding of anaphylaxis	
	Infrequent or not determined (3)	Systematic review (4); EDs, US (37); Military medical center, US (46)
Follow-up care	Prescribing auto-injectors or epinephrine	
	Infrequent (6)	EDs, US (31); Army hospital database, US (43); Multidisciplinary pediatric allergy clinic, UK (49); Tertiary pediatric hospital, Australia (59); Pediatric and general practices, Germany (58); Communities, US (67)
	Not the most commonly prescribed treatment for anaphylaxis (5)	EDs, US (31, 37); Army hospital database, US (43); AAP members, US (51); Pediatric and general practices, Germany (58)
Follow-up care	Referral to an allergy specialist	
	Infrequently or not done after acute reaction (6)	University hospital ED, France (26); Schools, UK (28); EDs, US (31); Community pediatric service, UK (35); Army hospital database, US (43); The quintile of the most deprived local authority area, UK (71)

US, United States; UK, United Kingdom; AAAAI, American Academy of Allergy, Asthma and Immunology; ED, emergency department; FAAN, Food Allergy and Anaphylaxis Network; AAP, American Association of Pediatrics.

Implementation of Anaphylaxis Management Guidelines: A Register-Based Study

Linus Grabenhenrich¹, Stephanie Hompes², Hannah Gough¹, Franziska Ruëff³, Kathrin Scherer⁴, Claudia Pföhler⁵, Regina Treudler⁶, Vera Mahler⁷, Thomas Hawranek⁸, Katja Nemat⁹, Alice Koehli¹⁰, Thomas Keil¹¹, Margitta Worm^{12*}

Methods: Within the anaphylaxis registry, allergy referral centres across Germany, Austria and Switzerland provided data on severe anaphylaxis cases. Based on patient records, details on reaction circumstances, diagnostic workup and treatment were collected via online questionnaire. Report of anaphylaxis through emergency physicians allowed for validation of registry data.

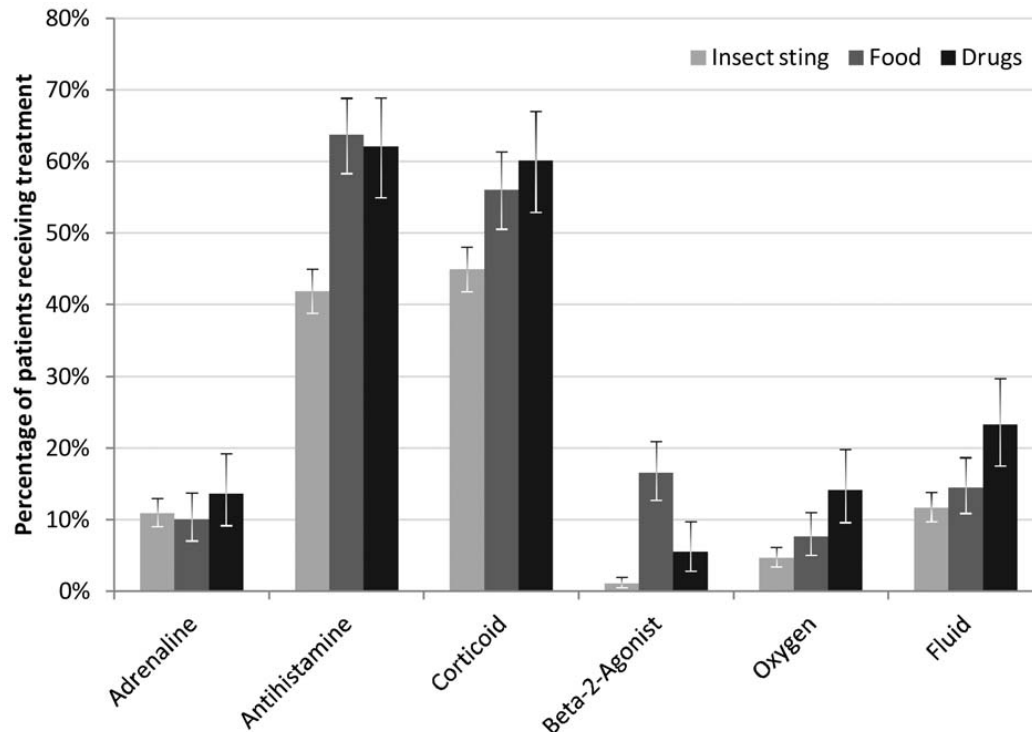
Results: 2114 severe anaphylaxis patients from 58 centres were included. 8% received adrenaline intravenously, 4% intramuscularly; 50% antihistamines, and 51% corticoids. Validation data indicated moderate underreporting of first aid drugs in the Registry. 20% received specific instructions at the time of the reaction; 81% were provided with prophylactic first aid drugs at any time.

Citation: Grabenhenrich L, Hompes S, Gough H, Ruëff F, Scherer K, et al. (2012) Implementation of Anaphylaxis Management Guidelines: A Register-Based Study. PLoS ONE 7(5): e35778. doi:10.1371/journal.pone.0035778

Editor: Yan Gong, University of Florida, United States of America

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Implementation of Anaphylaxis Management Guidelines: A Register-Based Study



Total
13% Adrenalina
50% AntiH1
51% Corticoids

Figure 1. Drugs used for emergency treatment of anaphylaxis, by cause. Only assured cases. All application routes, error bars indicate 95% confidence intervals.

doi:10.1371/journal.pone.0035778.g001

Implementation of Anaphylaxis Management Guidelines: A Register-Based Study

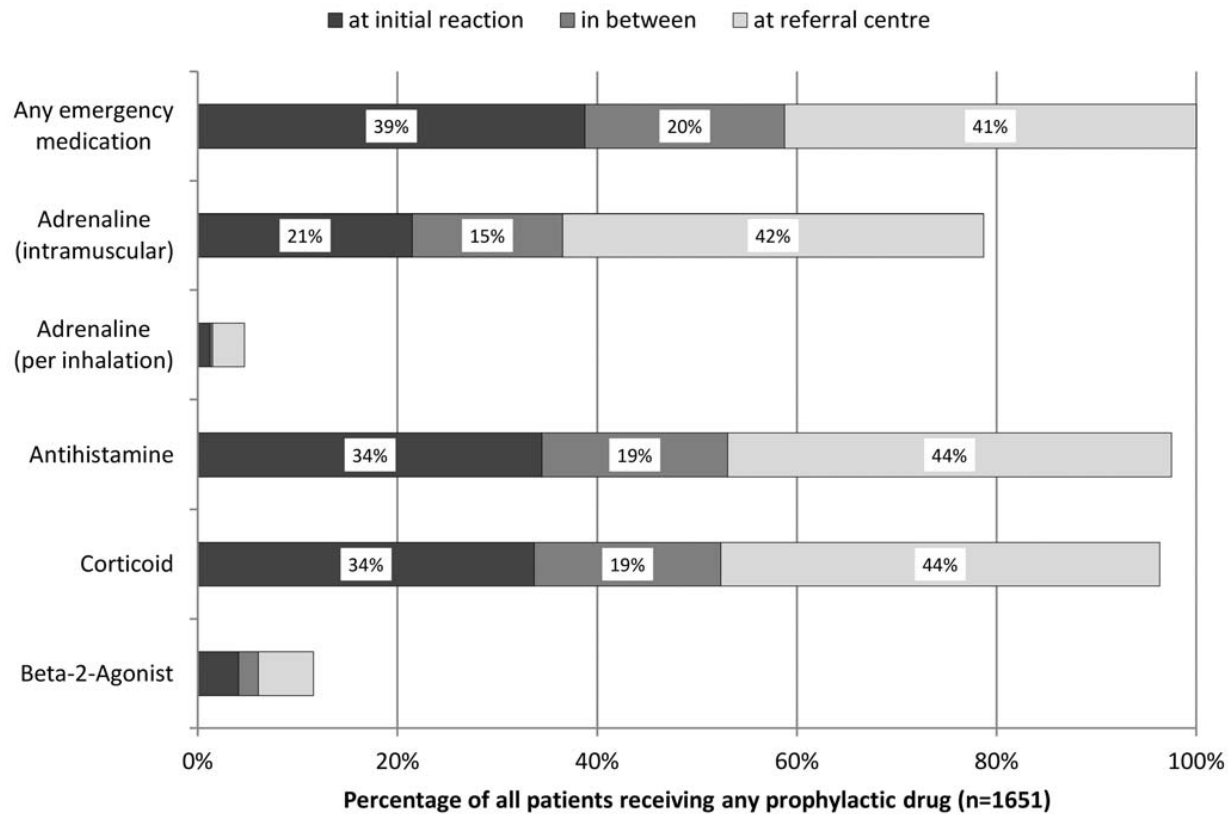


Figure 4. First time receiving prophylactic first aid drugs following severe anaphylaxis.
doi:10.1371/journal.pone.0035778.g004

Implementation of Anaphylaxis Management Guidelines: A Register-Based Study

Conclusion: There is a distinct discrepancy between current anaphylaxis management guidelines and their implementation. To improve patient care, a revised approach for medical education and training on the management of severe anaphylaxis is warranted.



Table 4 Reasons Among 245 Children and Adolescents for Nonuse of an Epinephrine Autoinjector during Anaphylactic Emergencies⁴⁴

Reason Cited for Nonuse	%
Thought autoinjector was not needed	54.4
Unsure whether autoinjector was needed	19.1
Had already called an ambulance	7.8
Autoinjector was not available	5.4
Was afraid to use autoinjector	2.5
Not trained to use autoinjector	2.5
Went to emergency department	1.5
Autoinjector had expired	1.0

Noimark L, Wales J, Du TG, et al. The use of adrenaline autoinjectors by children and teenagers. Clin Exp Allergy. 2012;42:284-292.



Dèficits en el control i seguiment

Allergists' self-reported adherence to anaphylaxis practice parameters and perceived barriers to care: an American College of Allergy, Asthma, and Immunology member survey

Stanley Fineman, MD, MBA^{*}; Paul Dowling, MD[†]; and Dianne O'Rourke, MPA[‡]

A B S T R A C T

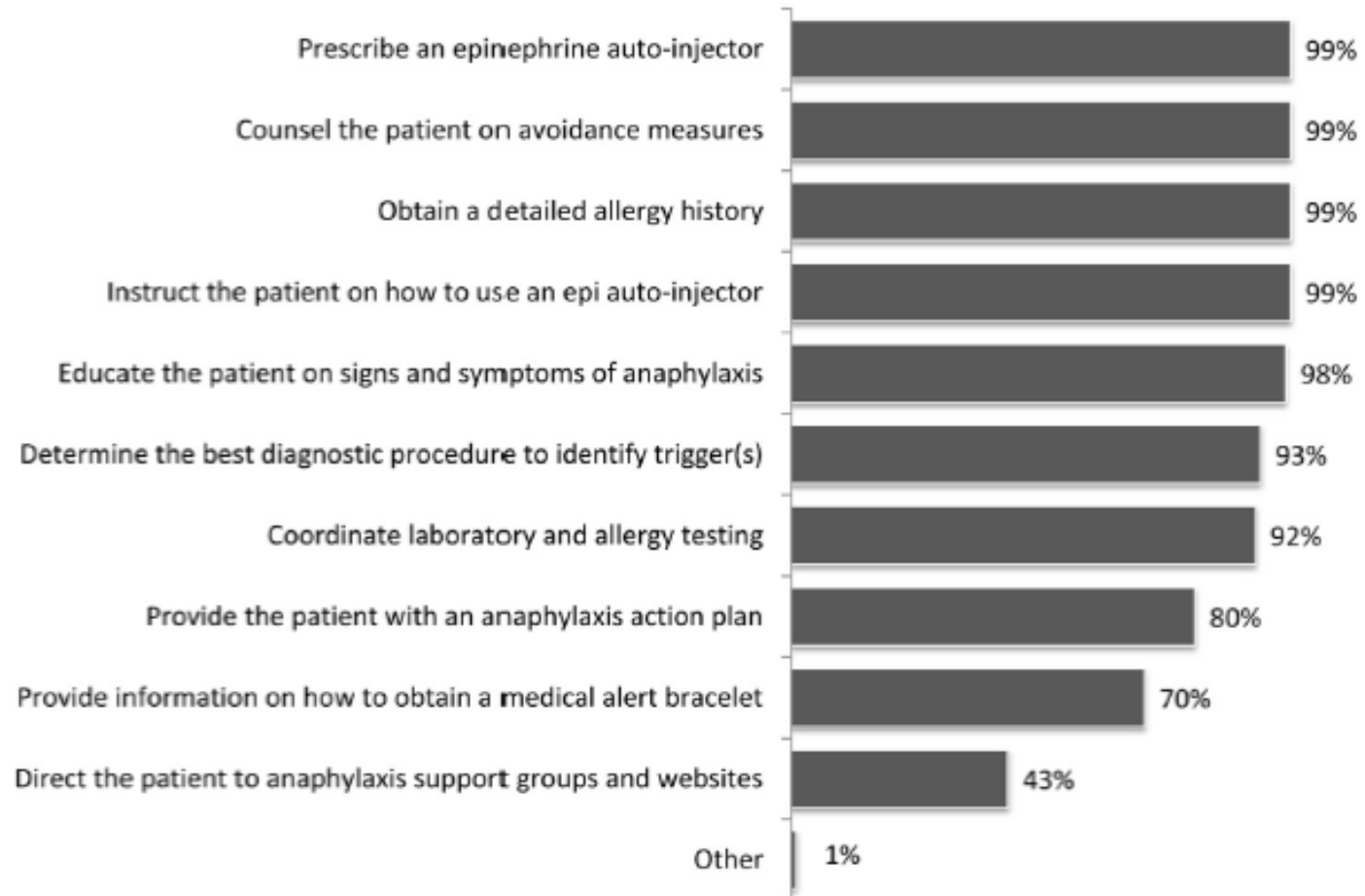
Background: Anaphylaxis is life-threatening and requires rapid medical intervention. Knowledge of treatment guidelines and addressing barriers to care are essential for appropriate management.

Objective: To investigate allergists' self-reported practices in managing patients at risk for anaphylaxis, specifically in following practice parameters for diagnosis, treatment, and appropriate use of epinephrine, and to identify perceived barriers to care.

Methods: Online questionnaires were distributed to members of the American College of Allergy, Asthma, and Immunology. The US physicians who self-identified as "allergist/immunologist" were eligible to participate. The first 500 completed questionnaires were analyzed.

Results: Nearly all ($\geq 95\%$) reported adherence to practice parameters in prescribing an epinephrine auto-injector and instructing patients on its use, taking a detailed allergy history, counseling patients on avoidance measures, and educating patients on the signs and symptoms of anaphylaxis. More than 90% stated they determined the best diagnostic procedures to identify triggers and coordinated laboratory and allergy testing. Adherence to practice parameters was less robust for providing patients with written action plans and in-office anaphylaxis preparedness. Perceived barriers to care included a significant proportion of patients who were uncomfortable using epinephrine auto-injectors and inadequate knowledge of anaphylaxis among referral physicians.

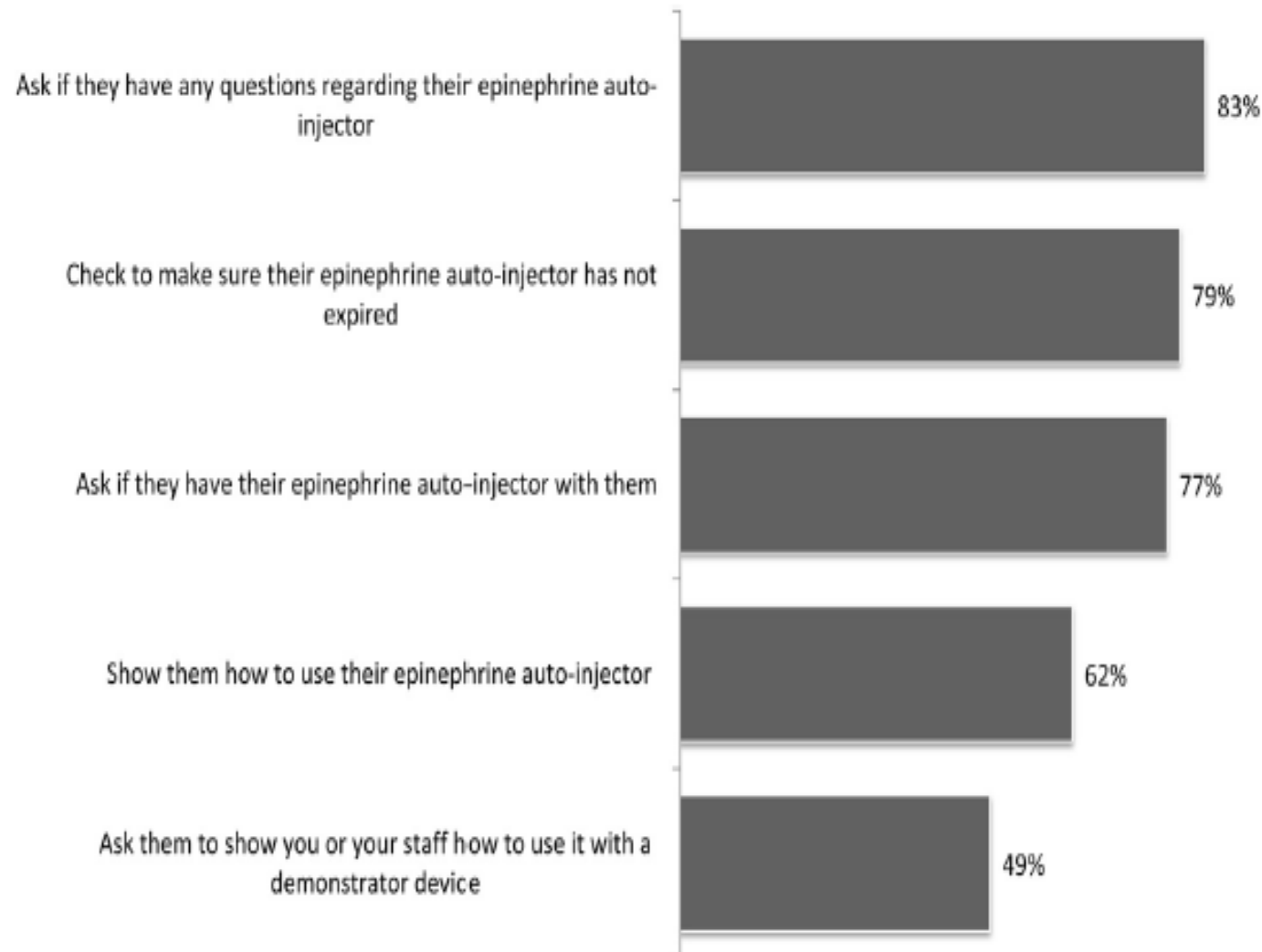
Conclusion: Allergists overwhelmingly adhere to practice parameter recommendations for the treatment and management of anaphylaxis, including appropriate use of epinephrine as first-line treatment, educating patients, and testing to diagnose anaphylaxis and identify its triggers. Opportunities for improvement include preparing staff and patients for anaphylactic events, providing written action plans, and improving knowledge of referring physicians.



BASE: ALL ACAAI ALLERGISTS (n=500)

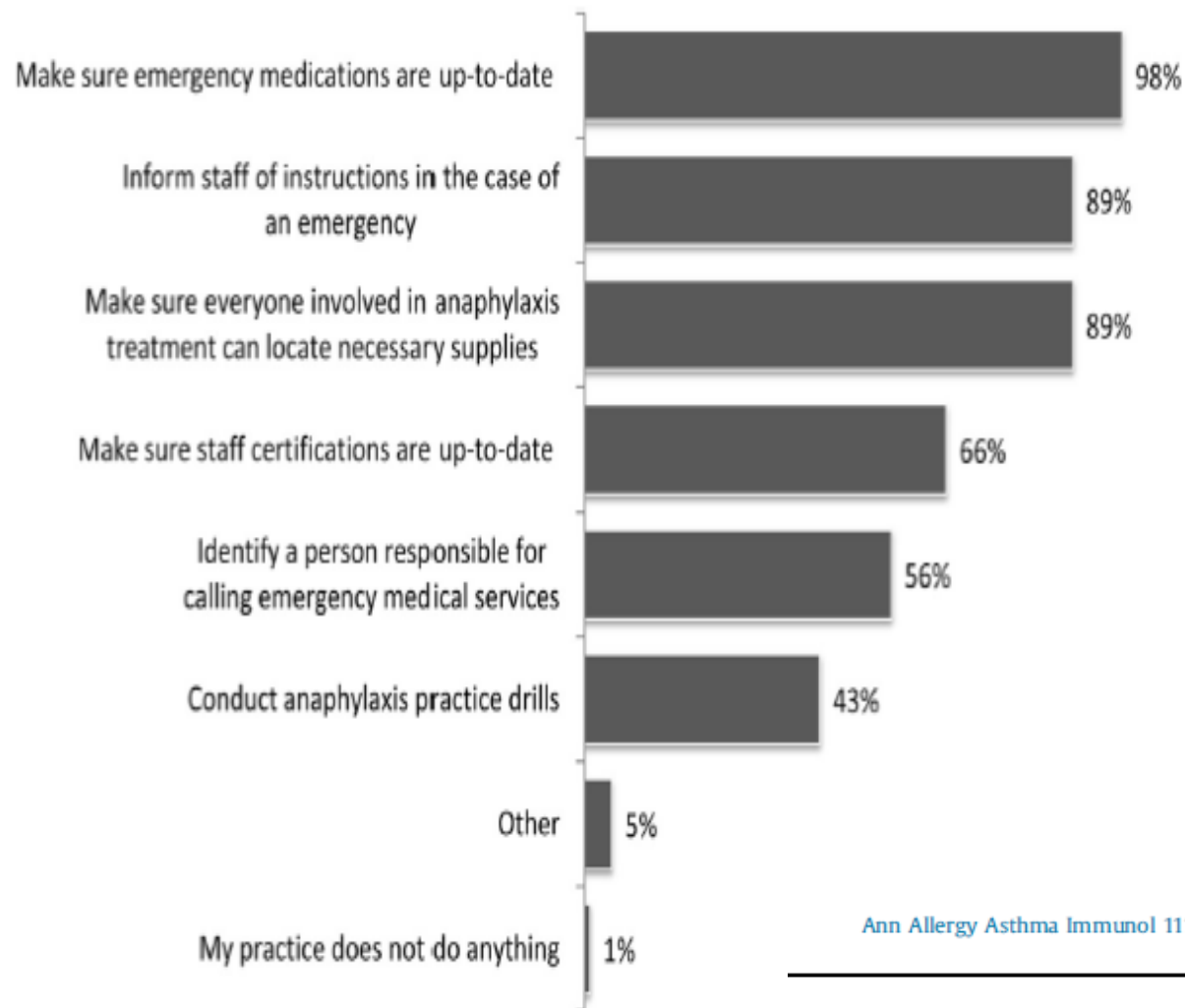
QUESTION: Which of the following, if any, do you typically do when treating a patient at risk for anaphylaxis?
Please select all that apply.

Figure 2. Treating patients at risk for anaphylaxis. ACAAI, American College of Allergy, Asthma, and Immunology.



BASE: ALL ACAAI ALLERGISTS (n=500)

QUESTION: Which of the following, if any, do you do during each appointment with a patient at risk for anaphylaxis at your office or practice? Please select all that apply.



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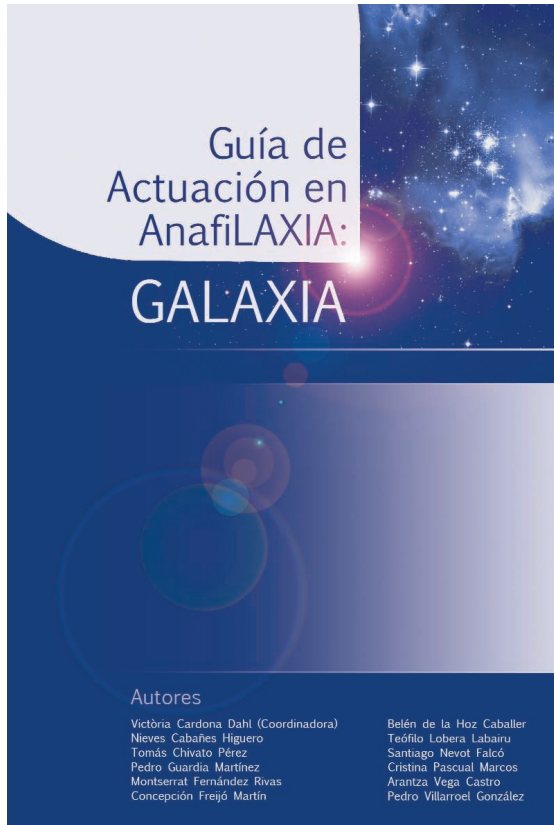
BASE: ALL ACAAI ALLERGISTS (n=500)

QUESTION: Which of the following, if any, has your practice done to prepare for patients presenting with anaphylaxis? Please select all that apply.

Figure 5. Anaphylaxis preparedness. ACAAI, American College of Allergy, Asthma, and Immunology.

Guia Galaxia

- Primera guia consensuada per al maneig de l'anafilaxi a Espanya.





GALAXIA: Guía de Actuación en AnafiLAXIA

Grupo de trabajo

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