Epidemiology of Anaphylaxis: Contributions From the Last 10 Years

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CME Items

- 1. Which one of the following problems cannot explain the marked differences between incidence rates and prevalence reported in the literature?
 - a. The absence of an agreed definition among authors
 - b. The use of different coding systems
 - c. Differences in data sources (hospital emergency services, hospital admissions, outpatient allergy department, general population)
 - d. Differences in data collection tools and methods for selecting possible cases
 - e. Restricted access to the records of national health systems
- 2. According to general epidemiological data on the prevalence and incidence of anaphylaxis, which of the following statements is incorrect?
 - a. The prevalence of anaphylaxis is estimated at 0.3% to 5.1% of the population depending on the rigor of the definitions and the methodology used.
 - b. According to studies carried out during the last 10 years, the incidence in the general population is higher than 50 new cases per 100 000 person-years.
 - c. Publications from various geographic areas based on clinical and administrative data in hospitalized patients suggest that the frequency of admissions due to anaphylaxis has remained stable during the last 10-15 years.
 - d. The incidence of anaphylaxis in children aged under 5 years is 3 times greater than in other age groups.
 - e. The prevalence of death due to anaphylaxis is between 0.3% and 2% of all cases of severe anaphylaxis.
- 3. Which one of the following statements on the frequency of anaphylaxis in different epidemiologic studies is false?
 - a. Studies that have ascertained the frequency of anaphylaxis during the last 10 years are based on the incidence or prevalence of anaphylaxis.
 - b. Until 2005, most studies reported an incidence rate of fewer than 50 episodes of anaphylaxis per 100 000 person-years.
 - c. Anaphylaxis is more frequent in women than in men aged under 20 years.
 - d. The incidence of anaphylaxis in a Spanish series stands at 111.2 events per 100 000 person-years, which is the highest rate to date.
 - e. Food-induced anaphylaxis is more frequent in younger age groups.

- 4. Which of the following statements supports a real increase in the frequency of anaphylaxis in recent years?
 - a. A better understanding and knowledge of anaphylaxis
 - b. An increase in the rates of hospital admissions because of anaphylaxis
 - c. Increases in the frequency of fatal anaphylaxis
 - d. Increases in the frequency of food anaphylaxis in children are parallel to increases in the frequency of food allergy in different international studies.
 - e. Optimized diffusion of clinical guidelines on anaphylaxis
- 5. Which of the following is true for countries with wide variations in latitudes in their national territory?
 - Differences in adrenaline auto-injector prescription have not been observed between the different latitudes.
 - b. An increased incidence of visits to pediatric emergency services and admissions for anaphylaxis has been observed in geographic areas with less sunlight.
 - Variations in the incidence of anaphylaxis between these countries have been related to ingestion of different amount of saturated fat.
 - d. Only studies from the USA have shown that the incidence of anaphylaxis is higher in regions with few hours of sunlight.
 - e. In areas with more hours of sunlight, the incidence of anaphylaxis is higher than in areas with fewer hours.
- 6. With respect to variations in the incidence of anaphylaxis, which of the following is the correct answer?
 - a. In several studies, anaphylaxis was nearly 3 times more prevalent in patients aged 0-4 years and was caused by foods.
 - b. According to some studies, anaphylaxis was more frequent in women aged up to 10-15 years and after 15 years in men.
 - c. Food anaphylaxis is more frequent in older age groups, while anaphylaxis due to drugs is more common in the first and second decades of life.
 - d. According to studies conducted in the UK and in the USA, the presence of asthma does not increase the risk of anaphylaxis.
 - e. In countries with lower exposure to sunlight, the incidence of anaphylaxis is low.

- 7. With respect to recurrence of anaphylaxis, which of the following answers is incorrect?
 - a. The risk of anaphylaxis differs depending on the cause
 - b. At least 25-30% of patients who have survived an episode of anaphylaxis experience 1 or more recurrences.
 - According to some studies, patients with anaphylaxis caused by medication have a lower risk of recurrence than those with idiopathic, food-induced, or exercise-induced anaphylaxis.
 - Recurrence of anaphylaxis is one of the most widely studied issues in the epidemiology of anaphylaxis.
 - e. Recurrence of Hymenoptera anaphylaxis is common in geographic areas with higher levels of exposure to Hymenoptera.
- 8. With respect to fatal anaphylaxis, which of the following answers is incorrect?
 - a. Studies show that the incidence of death from anaphylaxis is very low, ranging from 0.12 to 1.06 deaths per million persons per year.
 - b. According to published studies, rates of fatal anaphylaxis have increased considerably during the last 15 years.
 - The 3 leading causes of fatal anaphylaxis in descending order are drugs, Hymenoptera sting, and food.
 - d. The distribution of deaths from anaphylaxis depends on age, sex, and cause.
 - e. In some countries, peaks of anaphylaxis related to insect sting-induced anaphylaxis have been observed during the summer months.

- 9. According to the risk factors for fatal anaphylaxis, which of the following answers is incorrect?
 - a. Food-induced anaphylaxis is more frequently fatal before 35 years, whereas Hymenoptera- and drug-induced anaphylaxis is more frequently fatal after 40-50 years.
 - b. Deaths from anaphylaxis are not usually preceded by nonfatal anaphylaxis.
 - c. Fatal anaphylaxis is more frequent in older than in younger persons.
 - d. According to some studies, men are generally more likely to die from anaphylaxis than women.
 - e. A high proportion of patients with fatal foodinduced anaphylaxis had asthma, which, in some cases, was not controlled.
- 10. With respect to the causes of fatal anaphylaxis, which of the following answers is correct?
 - Up to 75% of deaths due to food-induced anaphylaxis were caused by legumes, according to several American, Swedish, and English studies.
 - b. In all studies, foods are the main cause of fatal anaphylaxis.
 - c. In some studies on fatal drug-induced anaphylaxis, the drugs responsible were penicillins-cephalosporins, radiological contrast media, and antineoplastic drugs.
 - d. The frequent use of some drugs in current medical practice does not explain the drugs implied in fatal drug-induced anaphylaxis.
 - e. The frequency of fatal food-induced anaphylaxis has increased by 200-300% in several studies during the last 15 years.