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?
   a. 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.
   c. 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.
   c. 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.
   d. 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.
   c. 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 food-induced 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?
    a. 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.