History and classification of anaphylaxis.

Anaphylaxis is the maximal variant of an acute allergic reaction involving several organ systems. The phenomenon itself is old, but it was recognized and named at the beginning of the 20th century by Richet and Portier. The clinical symptoms of anaphylaxis affect various organs, most commonly starting in the skin and proceeding to the respiratory tract, to gastrointestinal involvement and to cardiovascular symptoms, and finally to cardiac and/or respiratory arrest. Anaphylaxis stricto sensu is an immunological reaction, mostly mediated by IgE antibodies, but also by IgG or IgM antibodies (immune complex anaphylaxis). There are cases with similar clinical symptomatology without detectable immunological sensitization which are called pseudo-allergic or anaphylactoid reactions. In the newer nomenclature, some authors tend to include these under the heading of 'anaphylaxis' which has then to be defined as an acute systemic hypersensitivity reaction. The most common elicitors of anaphylaxis include drugs, foods, additives, but also other allergens as well as physical factors (cold, heat, UV radiation). The clinical outcome--the intensity of the reaction--is not only influenced by the degree of sensitization, but also by concomitant other factors: sometimes, individuals only develop anaphylaxis after simultaneous exposure to the allergen and an infection, physical exercise, psychological stress or concomitant medication (e.g. beta blockers). The term 'summation anaphylaxis' has
been proposed for this phenomenon which probably underlies many cases of so-called idiopathic anaphylaxis. In patients with insect venom anaphylaxis, decreased levels of plasma angiotensin have been measured in inverse correlation to the severity of the reaction. Certain differential diagnoses have to be distinguished from anaphylaxis. Every patient with a history of anaphylaxis should undergo allergy diagnosis with the aim to detect the eliciting agent, characterize the relevant pathomechanism (e.g. IgE-mediated reaction) and to offer a tolerable alternative (in food or drug allergy). In clear-cut IgE-mediated anaphylaxis, allergen-specific immunotherapy (hyposensitization) is the effective causal treatment, with success rates of 90% in insect venom anaphylaxis.