

Christi Makas

CAT Block 12 R2

Reference: Ziberstein, J., et al. Anaphylaxis. The Journal of Emergency Medicine; Aug 2014 47(2):182-187.

Clinical Objective: To understand and Manage Critical Anaphylaxis

Intro: Approximately 1500 pt's die each year from Anaphylaxis. Lifetime prevalence is 0.5%-2%. Symptoms are rapid in onset and death can occur within minutes. Any delay in recognition can be deadly.

Discussion: Review of recent literature and updated international anaphylaxis guidelines improve our understanding of management of anaphylaxis. Food is the most common cause of anaphylaxis. However, cutaneous manifestations are frequently absent in food allergies. GI symptoms indicate a more severe reaction. Food allergies are not only limited to ingestion and can occur with topical peanut or other oils. Inhalation anaphylaxis can occur with dust mites or allergens. Symptoms manifest quickly, approximately 5 min for IV medications, 15 min for insect stings, and 30 min for ingestion and the more rapid the symptoms the more severe the reaction. Interestingly almost all deaths for anaphylaxis in food related allergies are in people already diagnosed with asthma. Approximately 50% of deaths from insect stings have no previous known exposure. 6-27% of anaphylaxis cases are idiopathic with no known trigger.

Treatment: Rapid assessment of ABC's with a very low threshold for intubation. Consider awake fiberoptic intubation since RSI and change of positions can lead to rapid airway deterioration. Epinephrine is the 1st drug of choice and should be given IM in the anterolateral thigh. The dose is .)1 mg/kg of 1:1000 or 0.3-0.5mg. You can repeat this every 5-15 min as needed. If pt remains unresponsive after 2 IM doses start IV epi at 1 ug/min and increasing by 1 ug every 5 min. Second line medications include antihistamines (25-50mg of Benadryl plus H1 blocker 75-150mg ranitidine, note these only tx cutaneous symptoms) and corticosteroids (decadron, prednisone or solumedrol, note not effective until 1 hour). Aggressive IVF should be used to treat hypotension caused by intravascular volume depletion. Fluids should be given even if vital signs are stable due to extravasation of intravascular volume into interstitial tissues. For refractory consider NorEpi, dopamine, vasopressin, and atropine.

Disposition: They quote a biphasic anaphylactic reaction in 1 out of 5 pts with recurrence up to 72 hours later. Variety or observational periods are recommended but no current standard exists. Follow up within 24 hours is recommended if the pt is discharged. All pt's should be d/c with Epi Pen.
