

M8

ANAPHYLAXIS

Allergic reactions form a continuum ranging from mild localized swelling or itchiness to severe, generalized reaction with cardiorespiratory compromise. Anaphylaxis is an extreme form of an allergic reaction. It is an acute, generalized reaction that may be rapidly fatal even with prompt and appropriate medical care. An antigen is a foreign substance to which the body mounts an immune response. Examples of potent antigens include antibiotics (penicillins, sulfas), insect stings (bees, wasps), foods (peanuts, strawberries), or other substances (perfumes, cleaning agents). Antigens such as these are often referred to as “allergens” because of the allergic response they produce.

Anaphylaxis may develop in seconds to minutes after the ingestion, injection, inhalation, or absorption of the antigenic substance. Anaphylaxis is an emergency that requires prompt recognition of the condition and appropriate treatment by EMS personnel. This initial treatment may be life saving.

GENERAL

- personal protective equipment should be utilized as appropriate
- body substance isolation techniques and equipment should be utilized as appropriate
- primary survey
- administer high concentration oxygen
- assess the patient for symptoms or signs that may indicate a moderate or severe anaphylactic reaction
 - abdominal cramps, nausea, vomiting
 - altered level of consciousness
 - vital signs
 - tachycardia or bradycardia (late finding)
 - tachypnea
 - elevated blood pressure or decreased blood pressure (if reaction is severe)
 - respiratory system
 - swelling of the face, mouth, throat
 - wheezing, stridor, difficulty with secretions
 - partial or complete airway obstruction
 - cardiovascular system
 - chest tightening or pain
 - skin
 - local warmth and swelling, urticaria (hives), rash
 - swelling of extremities
- obtain a focused history
 - time of onset of symptoms
 - possible source of exposure to allergen(s)
 - known sensitivities and allergies
 - medical identification, such as Medic Alert bracelet or neck chain

- medications the patient takes
 - routinely to prevent reactions
 - in emergency situations for anaphylaxis
- whether patient has self-administered any emergency medications
 - name of medication(s)
 - dose of medication(s)
 - time(s) of administration
 - number of doses
 - results of medication(s)
- EMS personnel can assist a patient experiencing anaphylaxis to take his or her own epinephrine
- initiate transport
 - on scene times should be kept to a minimum
 - treat other life-threatening conditions en route
- transport the patient to the nearest appropriate health care facility
 - notify the receiving health care facility of the patient's status as soon as possible
 - monitor and treat the patient en route
 - high concentration of oxygen should be delivered to the patient
 - be prepared to support respiratory and circulatory functions
 - additional surveys and treatments should be conducted en route
 - treat for shock, if indicated (see Shock Guideline)
- report all findings to the receiving facility staff, and document on the patient care report

SPECIAL CONSIDERATION

- anaphylaxis is a true medical emergency – time to initial treatment and definite care are critical
 - rapid assessments, appropriate interventions, and early load and go can impact on the patient's outcome
- respiratory compromise in the setting of anaphylaxis is an indication for immediate transport
- a "hoarse" voice in a patient having an allergic reaction is a danger signal of an impending airway obstruction
- if an insect stinger is imbedded in the skin, remove by scraping with a fingernail or scissors
 - do not grasp the stinger to remove it
 - do not delay load and go to remove stinger
- if time permits, remove jewelry from the affected area
 - once the area is swollen, it may be difficult to remove and may cause distal neurovascular compromise
- if the anaphylactic reaction is possibly due to a substance injected into an extremity, refer to the Injected Poison section of the Poisoning Treatment Guideline

NOTE

- patients typically have a past medical history of allergies or anaphylaxis due to specific known allergens
 - patients may have an anaphylactic reaction the first time they come into contact with a substance
- EMS personnel trained and certified to treat anaphylaxis using epinephrine may do so as outlined in the Anaphylaxis Protocol
 - EMS personnel should administer epinephrine to the patient as early as possible
 - refer to Anaphylaxis Treatment Protocol

NOTES :