Mild Symptoms
Patient should be observed for the progression or evolution of a more severe reaction, which requires treatment:

- Scattered Urticaria
- Diaphoresis
- Nausea
- Pruritus
- Coughing
- Brief retching and/or vomiting
- Rhinorrhea
- Dizziness

Moderate Symptoms/Severe Symptoms

- **Persistent Vomiting**

- **Diffuse Urticaria**
  - Symptoms mild or moderate: Diphenhydramine 50 mg may be administered orally, intramuscularly, or intravenously.
  - Severe: Treatment is as above; consider adding Cimetidine 300 mg by slow intravenous injection or Rantidine 50 mg by slow intravenous injection.

- **Laryngeal edema**
  - Mild to moderate: Treatment includes oxygen 10-12 L by face mask and epinephrine 1:1000 0.1-0.3 mL given subcutaneously, repeated every 10-15 minutes as needed until 1 mL is administered.
  - Moderate to severe: Consider calling a code or intubating the patient. Consider adding Diphenhydramine 50 mg slow intravenous injection.

- **Bronchospasm**
  - Mild: Treatment includes oxygen 10-12 L by face mask, close observation, and/or 2 puffs of an Albuterol or Metaproterenol inhaler.
  - Moderate, without hypotension: Treatment is as above, with Epinephrine 1:1000, 0.1-0.3 mL given subcutaneously, repeated every 10-15 minutes as needed until 1 mL is administered.
  - Severe: Administer Epinephrine 1:10,000 1 mL slow intravenous injection over approximately 5 minutes, repeated every 5-10 minutes as needed.

- **Isolated hypotension**
  - Raise the patient’s legs as much as possible while preparing to administer intravenous fluids.
  - The Trendelenburg position can also be effective if the radiographic table can tilt.
  - Oxygen should be administered in high doses.
• **Hypotension with tachycardia**
  o Mild to moderate: Elevate the patient’s legs. Administer oxygen 10-12 L by face mask, and intravenous isotonic fluid (e.g., 0.9% isotonic sodium chloride solution, Ringer lactate solution).
  o Severe or unresponsive: Treatment is as above, with dopamine 2-20 mcg/kg/min. **Call a code if no response occurs.**

• **Vasovagal reaction**
  o Mild to moderate reaction: Elevate the patient’s legs. Administer oxygen 10-12 L by face mask, and intravenous isotonic fluid (e.g., 0.9% isotonic sodium chloride solution, Ringer lactate solution).
  o Severe reaction or unresponsive patient: Administer intravenous atropine 0.6-1 mg, repeated every 3-5 minutes as needed until a total of 3 mg is administered.

• **Unresponsive patient**
  o Call a code.
  o Defibrillation may be needed to treat ventricular fibrillation and pulseless ventricular tachycardia.
  o Administer basic life support.

**References**