NYC HEALTH+ HOSPITALS | Kings County

Emergency Department Clinical Guidelines

ED/CCT Anaphylaxis Guidelines

Clinical Context and Purpose

Anaphylaxis represents a potentially rapidly evolving, serious allergic reaction and is a common presentation to the Emergency Department. The goal of this clinical guideline is to provide guidance in the assessment and management of patients presenting to the Emergency Department with anaphylaxis.

Background

There are several triggers for anaphylaxis including but not limited to certain foods, insect stings, blood products, and medications. The criteria for diagnosis of anaphylaxis are as follows:

1. Acute onset of an illness, developing over minutes to several hours, involving the skin, mucosal tissue, or both (e.g. urticaria, generalized pruritis or flushing, edema of lips, tongue, or uvula) AND at least one of the following:
    - Respiratory distress (e.g. dyspnea, bronchospasm, stridor, hypoxemia)
    - Hypotension, or associated symptoms of end organ dysfunction (hypotonia, cardiovascular collapse, syncope, incontinence)
2. Two or more of the following that occur rapidly after exposure to a likely allergen for that patient and evolving over minutes to several hours:
    - Involvement of the skin, mucosal tissue (e.g. generalized urticaria, itch-flush, edema of lips, tongue, or uvula)
    - Respiratory distress (e.g. dyspnea, bronchospasm, stridor, hypoxemia)
    - Hypotension, or associated symptoms of end organ dysfunction (hypotonia, cardiovascular collapse, syncope, incontinence)
    - Persistent gastrointestinal symptoms (e.g. crampy abdominal pain, vomiting)
3. Hypotension after an exposure to a known allergen for that patient (minutes to several hours)
    - Systolic BP of <90 mmHg or >30% decrease from baseline BP

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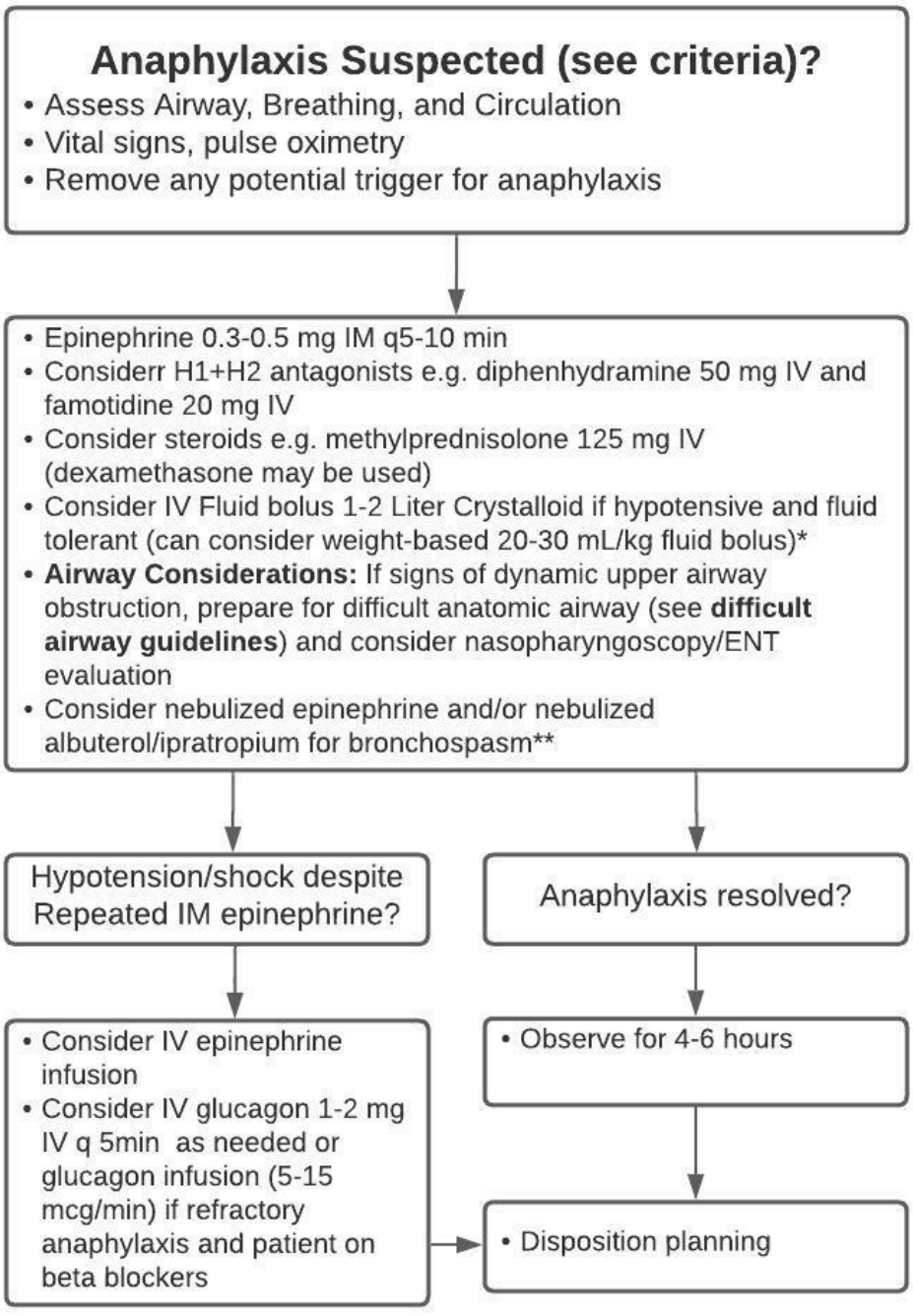
Anaphylaxis Guideline



*Frequently reassess patients during and after receipt of fluid bolus therapy.

**Bronchodilator therapy may be administered via MDI.

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Disposition Planning:

High risk features to consider for disposition planning:

- Initial severe anaphylactic reaction/presentation that responds promptly to IM Epinephrine and which does not require airway intervention
- Beta-blocker use, asthma
- Limited access to phone or emergency services
- Patients with congestive heart failure, renal failure, or patients who may be at risk of fluid overload in response to intravenous fluids
- Requirement for repeated doses of IM epinephrine

1) In patients with resolved anaphylaxis with high risk features, consider placement in observation unit (see Observation Unit Anaphylaxis Protocol).
2) In patients with resolved anaphylaxis following 1 dose of IM epinephrine with no high risk features, can consider discharge after a 4-6 hour period of observation.
3) In patients with severe anaphylaxis and/or anaphylactic shock, with requirement for airway management/monitoring and/or need for epinephrine infusion, consult with Medical Critical Care.
4) For patients with requirement for >3 doses of IM epinephrine, high risk features for severe/biphasic anaphylaxis, medically complex beyond the capabilities of the observation unit, and not requiring continued critical care, can consider admission to medicine.

Resources/References

Singer, E. and Zodda, D. Allergy and Anaphylaxis: Principles of Acute Emergency Management. *Emerg Med Pract.* 2015. Aug;17(8):1-19.

Long, B. and Gottlieb, M. Emergency Medicine Updates: Anaphylaxis. *American Journal of Emergency Medicine.* 2021. (49):35-39.

Dodd, A. et al. Evidence Update for the Treatment of Anaphylaxis. *Resuscitation*. 2021. (163):86-96.