



**I. Scope:**

**Line of Responsibility:** Physicians, Nursing, and Pharmacy

**II. Purpose:**

To provide guidelines for the administration of agents to treat angioedema due to thrombolytic therapy. Treatment options for thrombolytic-induced angioedema are unproven and come from multiple case reports but include the administration of agents to treat a hypersensitivity-type reaction.

**III. Guidelines:**

Angioedema due to thrombolytics can result at any time during the infusion. Edema involving larynx, palate, floor of mouth, or oropharynx with rapid progression (within 30 minutes) poses higher risk of requiring intubation. Patients on ACE inhibitors are at higher risk of developing angioedema. Previous thrombolytic administration has also been shown to increase risk.

- A. In patients with life-threatening angioedema, immediately discontinue the thrombolytic. Discontinue ACE inhibitors on the medication administration record.
- B. Evaluate airway management. Consider early intubation if necessary.
- C. In patients with angioedema, the following may be used:
  - 1. Methylprednisolone 125mg IV
  - 2. Diphenhydramine 50mg IV
  - 3. Famotidine 20mg IV
  - 4. If no improvement and continued worsening, administer epinephrine (0.1%) 0.3mL subcutaneously or by nebulizer 0.5mL

**IV. Related Policies:**

PC 251 Stroke Management Policy

PC 239 Thrombolytic Therapy for MI or Acute Stroke

**V. Attachments: (Click Attachments Tab to Open)**

None

**VI. References:**

Frohlich K., Macha, K., Gerner, S. T., Bobinger, T., Schmidt, M., Dorfler, A., Hilz, M. J., Schwab, S., Seifert, F., Kallmunzer, B., & Winder, K. (2019, July). *Stroke*. 50(7), 1682-1687

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Guideline for the Early Management of Patients with Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Patients with Acute Ischemic Stroke: A Guideline for Healthcare Professionals from the American Heart Association/American Stroke Association. *Stroke*. 2019; 50:344-418

<https://www.ahajournals.org/doi/10.1161/STR.0000000000000211>

Madden, B., & Chabl R. B. (2015). Hemi orolingual angioedema after tPA administration for acute ischemic stroke. *West Journal Emergency Medicine*, 16(1), 175-177. [Hemi Orolingual Angioedema after tPA Administration for Acute Ischemic Stroke \(nih.gov\)](#)