Management of Angioedema Due to Alteplase
Early Diagnosis is Key

Incidence: Estimated 1% to 2% of all alteplase treated stroke
Common in patients taking angiotensin-converting enzyme inhibitors
Usually starts near end of alteplase infusion

1. Begin examining tongue 20 minutes before IV alteplase infusion is complete and repeat several times until 20 minutes after alteplase infusion. Look for any signs of unilateral or bilateral tongue enlargement.

2. If angioedema suspected, immediately:
   - A. Consider early discontinuation of alteplase infusion
   - B. Diphenhydramine 50 mg IV
   - C. Famotidine 20 mg IV
   - D. Methylprednisolone 125 mg IV

3. If any further increase in angioedema:
   - A. Epinephrine (1mg/1ml) 0.3-0.5 mg IM or Racemic Epinephrine by nebulizer 0.5 ml
   - B. Call ENT/Anesthesiology or appropriate in-house service STAT for possible emergency cricotomy/tracheostomy or fiberoptic nasotracheal intubation if oral intubation unsuccessful.
   - C. DISCONTINUE IV alteplase INFUSION.

   Tongue large but oral intubation possible
   - Perform orotracheal intubation
     - STAT

   Tongue too large for orotracheal intubation
   - Perform fiberoptic nasotracheal intubation

   Severe stridor impending airway obstruction
   - Perform tracheostomy

Pooja K. Levine J. Jovin T. Intravenous thrombolytic therapy for acute ischemic stroke: Continuum: Lifelong Learning Neurology 2008;14(6);53.
Approved by Stroke Committee: 5/2015; revised 11/2019
Approved by P&T Committee: 5/2015