MANAGEMENT OF ANGIOEDEMA CAUSED BY ALTEPLASE (tPA) USE IN ACUTE ISCHEMIC STROKE

Background:

- Reported in 1.3% of patients treated with IV Alteplase (tPA) for acute stroke.
- Has been associated with Angiotensin-Converting Enzyme (ACE) inhibitor therapy and with a past medical history of angioedema reactions.
- Usually the reaction is observed approximately 45 to 90 minutes after the Alteplase (tPA) infusion was started.
- Patients usually report dysphagia and unilateral tongue swelling (usually to the same side as the hemiplegia). Progression to the entire tongue and oropharynx may occur.

Risk Assessment:

- Has the patient ever experienced angioedema in the past?
- Is the patient on an ACE inhibitor or Angiotensin receptor blockers (ARB)?

Benazepril (lotensin)	Fosinopril (monopril)	Ramapril (altace)	Valsartan (diovan)
Captopril	Lisinopril (zestril)	Trandolapril (mavik)	Epoprosartan (teveten)
Cilazapril (inhibace)	Perindopril (coversyl)	Candesartan (atacand)	Telmisartan (micardis)
Enalapril (vasotec)	Quinapril (accupril)	Irbesartan (avapro)	Losartan (cozaar)

- NB: Consider combination medications of diuretic and ACE inhibitor or ARB (e.g. Vasoretic).

Monitoring Parameters:

- Observe for facial, tongue and/or pharyngeal angioedema 30 min, 45 min, 60 min and 75 min after the start of the IV Alteplase (tPA) infusion and periodically for 24 hours afterwards.
- Monitor vital signs during infusion and for 24 hours after as per *Stroke Centre Alteplase (tPA) Standard Orders* (CLI.4110.PL.013.FORM.10)

Management as Ordered by Authorized Prescriber:

- Stop the infusion.
- Follow the algorithm below (recommended).