

### **Acute Stroke Protocol**

Acute stroke patients with known time of onset < 3 hours for tPA and < 6 hours for experimental treatment

Clinical presentation: aphasia, ataxia, diplopia, dysarthria, facial weakness, visual loss, hemiparesis, quadriparesis, hemisensory loss

Call a Stroke Code and state Stroke Code and give location of patient...this activates the Stroke Code Team

- Order a "Stroke Protocol" STAT head CT w/o contrast
- Draw blood for SMA-7, CBC with platelets, PT/INR/PTTT, T&S
- Check finger stick glucose should be > 50 but < 400
- Check blood pressure: should be < 185 systolic and < 110 diastolic before giving tPA
- Perform NIHSS (see reverse)
- Review history for possible contraindications for thrombolysis

### **Contraindications for thrombolysis (tPA):**

- Stroke onset > 3 hours
- Rapidly improving or minor symptoms
- Seizure at onset
- FSG < 50 or > 400
- Inability to easily lower SBP < 185 or DBP < 110
- Suspicion of Subarachnoid Hemorrhage
- Intracerebral hemorrhage on CT
- H/o intracranial neoplasm, AVM, or aneurysm
- Any prior history of intracranial hemorrhage
- Head trauma, intracranial or spinal surgery or stroke within 3 months
- Major surgery within 2 weeks
- GI or GU hemorrhage < 21 days
- Noncompressible arterial puncture < 7 days
- Warfarin use with INR > 1.7 or PT > 15 secs
- Heparin use < 48 hours with elevated PTT
- Platelets < 100,000

For tPA CONTROL BP: goal < 185 systolic and < 110 diastolic

Rx: Suggest 10-20 mg IV Labetalol over 1-2 minutes and may repeat x1

- Check BP q 15 minutes

TIME IS BRAIN: Rx earlier is better for BEST outcome

From Beth Israel Medical Center (2005), New York, NY

1a LOC	alert	0
	drowsy	1
	stuporous	2
	coma	3
1b LOC questions (month, age)	answers both correctly	0
	answers one correctly	1
	both incorrect	2
1c LOC commands (open and close eyes, make fist, let go)	obeys both correctly	0
	obeys one correctly	1
	both incorrect	2
2 Best Gaze	normal	0
	partial gaze palsy	1
	forced deviation	2
3 Visual	no visual loss	0
	partial hemianopia	1
	complete hemianopia	2
	bilateral hemianopia	3
4 Facial Palsy	normal	0
	minor	1
	partial	2
	Complete	3
5a Motor Arm Left	No drift	0
	Drift	1
	Can't resist gravity	2
	No effort against gravity	3
	No movement	4

5b Motor Arm Right	SCORE SAME as 5a	
6a Motor Leg Left	no drift	0
	drift	1
	can't resist gravity	2
	no effort against gravity	3
	no movement	4
6b Motor Leg Right	SCORE SAME as 6a	
7 Limb ataxia	Absent	0
	Present in one limb	1
	Present in two limbs	2
8 Sensory	Normal	0
	Partial sensory loss	1
	Severe sensory loss	2
9 Best Language	No aphasia	0
	Mild-mod aphasia	1
	Severe aphasia	2
	Mute	3
10 Dysarthria	None	0
	Mild-mod dysarthria	1
	Severe dysarthria	2
	Intubated	3
11 Extinction & inattention	No neglect	0
	Partial neglect	1
	Complete neglect	2
NIH Stroke Scale: score for each category and total		