UFHealth
SHANDS COMPREHENSIVE STROKE CENTER

Stroke Transfer Checklist

When preparing to transfer an acute stroke patient to the UF Health Shands Comprehensive Stroke Center, please make every attempt to include the following information:

- ☐ NIH stroke scale documentation to assess improvement or decline upon arrival to UF Health Shands Comprehensive Stroke Center.
- ☐ Time of symptom onset, or last time known well, and source of this information.
- ☐ Contact information of family members. (Cell phone if available.)
- ☐ Pertinent elements of patient past medical history. Especially atrial fibrillation, warfarin therapy, congestive heart failure, prior strokes, prior intracerebral hemorrhage, recent surgeries or instrumentation and trauma.
- ☐ Patient's current medications.
- ☐ Brief documentation of ALL therapies initiated at your hospital.
- ☐ If IV tPA is excluded, please document rationale.

In no circumstances should acquisition of these items delay the transfer of the patient. URGENT TRANSFER MINIMIZING TIME TO PRESENTATION IS AN ABSOLUTE PRIORITY.

To transfer a stroke or neurosurgical patient, call the UF Health Shands Transfer Center: 1.800.X.TRANSFER (1.800.987.2673).

To call a STROKE ALERT, call 352.265.0222 or 1.800.342.5365, and transport to UF Health Shands Hospital.

Visit UFHealth.org/stroke for more information.

PS142367-4/16/18

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NIH Stroke Scale

Place medical record sticker here.

CATEGORY	DESCRIPTION	SCORE	ADMIT SCORE
1. **Level of Consciousness** (Alert, drowsy, etc.)	Alert Drowsy Stuporous Coma	0 1 2 3	
a. LOC Questions (Month, age) Incorrect	Answers both correctly Answers one correctly 2	0 1	
b. LOC Commands (Open, close eyes; squeeze and let go) Incorrect	Obeys both correctly Obeys one correctly 2	0 1	
2. **Best Gaze** (Eyes open; patient follows examiner's fingers, face)	Normal Partial gaze palsy Forced deviation	0 1 2	
3. **Visual** (Introduce visual stimulus of threat to patient's visual field quadrants)	No visual loss Partial hemianopia Complete hemianopia Bilateral hemianopia	0 1 2 3	
4. **Facial Palsy** (Show teeth, raise eyebrows and squeeze eyes shut)	Normal Minor Partial Complete	0 1 2 3	
5. **Motor Arm** (Elevate extremity to 90° and score drift movement within 10°)			
a. Left Arm	No Drift Drift Some effort against gravity No effort against gravity No movement Amputation, joint fusion (explain)	0 1 2 3 4	
b. Right Arm		0 1 2 3 4	
6. **Motor Leg** (Elevate extremity to 30° and score drift movement within 5°)			
a. Left Leg	No Drift Drift Some effort against gravity No effort against gravity No movement Amputation, joint fusion (explain)	0 1 2 3 4	
b. Right Leg		0 1 2 3 4	
7. **Limb Ataxia** (Finger-nose, heel down shin)	Absent Present in one limb Present in two limbs	0 1 2	
8. **Sensory** (Pin prick to face, arm (trunk) and leg, compare side to side)	Normal Partial loss Severe loss	0 1 2	
9. **Best Language** (Name items, describe a picture and read sentences)	No aphasia Mild to moderate aphasia Severe aphasia Mute	0 1 2 3	
10. **Dysarthria** (Evaluate speech clarity by patient's repeating listed words)	Normal Mild to moderate aphasia Near to unintelligible or worse Intubated or other physical barrier	0 1 2 9	
11. **Extinction and inattention** (Use information on prior testing to identify neglect or double simultaneous stimuli)	No neglect Partial neglect Complete neglect	0 1 2	
		SCORE TOTALS	

MD Signature **MD #** **Date** **Time**

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tPA Protocol Checklist

Yes	No	Inclusion criteria
☐	☐	1. Stroke onset within 4.5 hours of initiation of IV tPA — deficit not improving
☐	☐	2. Patient over 18 years of age
☐	☐	3. Clinical diagnosis of ischemic stroke; CT excludes hemorrhage
☐	☐	4. Deficit sufficient to justify risk of tPA
☐	☐	5. Patient consents to use of tPA

Yes	No	Exclusion criteria
☐	☐	1. Current intracranial hemorrhage
☐	☐	2. Subarachnoid hemorrhage
☐	☐	3. Active internal bleeding
☐	☐	4. Recent (within 3 months) intracranial or intraspinal surgery or serious head trauma
☐	☐	5. Presence of intracranial conditions that may increase the risk of bleeding
☐	☐	6. Bleeding diathesis
☐	☐	7. Current severe, uncontrolled hypertension
☐	☐	8. Aortic arch dissection
☐	☐	9. Infective endocarditis
☐	☐	10. AIS within 3 months
☐	☐	11. History of ICH
☐	☐	12. GI malignancy or GI bleed within 21 days

Yes	No	Other considerations
☐	☐	1. Age over 80 years
☐	☐	2. CT evidence of early edema, mass effect or large infarct (especially if over 1/3 MCA territory)
☐	☐	3. NIH Stroke Scale over 20, severe stroke with coma, severe obtundation, complete hemiplegia

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tPA Quick Reference Sheet

Estimated Weight (lbs)	Conversion to Kilograms (kg)	Total IV tPA Dose (mg) at 0.9 mg/kg	tPA Bolus (mg) *10% of Total*	tPA Bolus (mL)	Discard Dose tPA (not for infusion)	Infusion Dose (mg)	Infusion Rate (mL/hr)
220+	100	90	9	9	10	81	81
210	95.5	86	8.6	8.6	14	77.4	77.4
200	90.9	81.8	8.2	8.2	18.2	73.6	73.6
190	86.4	77.8	7.8	7.8	22.2	70	70
180	81.8	73.6	7.4	7.4	26.4	66.2	66.2
170	77.3	69.6	7	7	30.4	62.6	62.6
160	72.7	65.4	6.5	6.5	34.6	58.9	58.9
150	68.2	61.4	6.1	6.1	38.6	55.3	55.3
140	63.6	57.2	5.7	5.7	42.8	51.2	51.2
130	59.1	53.2	5.3	5.3	46.8	47.9	47.9
120	54.5	49.1	4.9	4.9	50.9	44.2	44.2
110	50	45	4.5	4.5	55	40.5	40.5
100	45.5	41	4.1	4.1	59	36.9	36.9

1. Obtain patient weight.
2. Verify inclusion/exclusion criteria and discuss plan with patient and/or family. Obtain consent if possible. Do not delay treatment in absence of consent.
3. Verify that administration will start within 4.5 hours of symptom onset or time last known well.
4. Verify SBP < 185; DBP < 110
5. Usual dosage range and route:
   - 0.9 mg/kg to a maximum of 90 mg
   - First 10% of calculated dose as intravenous bolus dose
   - Remaining 90% of calculated dose given as infusion over 1 hour
6. Document neurologic assessment findings at least hourly or more frequently if neurologic changes occur.
7. If the patient's neurologic status declines during tPA infusion the following actions should be taken:
   - Stop the infusion
   - Draw and send PT/PTT
   - Obtain emergent CT

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Stroke Post-tPA Ambulance Transfer Orders

Place medical record sticker here.

tPA dosing and administration communication:

- This page is to be completed by ED RN and medical transport team, as applicable.
- Verify/confirm the following dosing and pump settings prior to departure.

	ED RN Initials	Medical Transport Initials
Patient wt: _____ kg		
Total tPA dose to be given: _____ mg		
Excess tPA discarded after mixing and ***before*** hanging on pump: ____**Yes:** _____ **mg** ____ No, excess still in bottle/bag		
Bolus dose: _____ mg Time given: _____		
Continuous Infusion:		
Dose: _____ mg Time started: _____		
Rate: _____ mg/hr **Estimated** time of completion: _____		
Actual stopped/completed time: _____		
Stopped early due to: _____		
Total amount tPA received: _____ mg (Ensure that all tPA in IV tubing is administered.)		

Signature/Title	Initials	Signature/Title	Initials

Medical transport team to hand off this completed communication form to RN at receiving facility upon arrival.

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Stroke Post-tPA Ambulance Transfer Orders

Place medical record sticker here.

Date _____/_____/_____ Time _____
Month Day Year

Transfer patient to _____ Dr. _____ has agreed to assume care.

Patient to be transported with Adult Life Support or Critical Care Transport with the following instructions:

Prior to departure:

1. Verify that systolic blood pressure is less than 180; diastolic less than 105. If BP above these limits, sending hospital should stabilize prior to transport.
2. Obtain contact method for family or caregiver (preferably cell phone) to allow contact during transport or upon patient arrival.
3. Perform and document initial neurological exam to establish baseline neurological status.
4. If tPA to continue during transport, review/verify tPA dosage and IV pump settings with transferring RN:
   a. Complete the "tPA Dosing and Administration Communication" form in this packet.
5. If the IV pump tubing used in the ED is not compatible with the pump used for transport, discuss the plan for pump and/or tubing change that will accommodate safe administration of the full and correct tPA dose, including the amount in the tubing.
   a. Adding an extension tubing set with a cartridge adaptable to the transport pump (such as a "half-set") may be a viable option, if available.
   b. If unable to accommodate administration of the full tPA dose enroute, hold patient in the ED until tPA infusion is completed.

During transport:

1. When the tPA bottle is empty, and before the pump alarms "air in line," replace the tPA bottle with a bag of 0.9% Sodium Chloride. Continue the infusion at the current settings on the pump until the preset volume is completed. This will ensure that the patient safely receives the full amount of tPA in the tubing.
2. Continuous cardiac monitoring and pulse oximetry.
3. O_2 per nasal cannula and titrate to maintain oxygen saturation at 94%.
4. Maintain NPO – including medications.
5. Perform and record neuro checks every 15 minutes.
   a. Cincinnati Stroke Scale (or other stroke scale) recommended. Include assessment for changes in initial or current symptoms or onset of new stroke-like symptoms.
   b. GCS and pupil exam.
6. Monitor and document vital signs every 15 minutes.
7. Use manual BP cuff if possible when using arm with antecubital IV site.
8. Maintain head of bed 25-30 degrees – less if tolerated.

(continued on next page)

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Stroke Post-tPA Ambulance Transfer Orders

Place medical record sticker here.

Blood pressure management:

Keep SBP less than 180 and DBP less than 105:

☐ IV Nicardipine (0.1mg/mL) infusion:
Increase Nicardipine by 2.5mg/hour every 5 minutes (to a maximum of 15mg/hour) until SBP is less than 180 and/or DBP is less than 105. If SBP is less than 140, or DBP is less than 80, turn off drip and call medical control for further instructions.

☐ Labetalol injection 10mg IV over 1-2 minutes, may repeat every 10 minutes as needed (maximum dose 300mg). Hold for HR < 50.

☐ Other: _____

Contact medical control for further orders if unable to manage SBP <180 and DBP < 105 using above medications.

Complication management:

1. Monitor for signs of intracranial hemorrhage (ICH) : acute worsening of neurological status as compared to baseline neuro-assessment or Glasgow Coma Scale, sudden onset of headache, nausea and/or vomiting, sudden elevation in blood pressure and/or bradycardia.

   If signs of ICH present:

   - Stop tPA if still infusing
   - Call medical control for further instructions
   - Continue to monitor and document VS and neuro exam every 15 minutes
   - Contact the receiving ED with update and ETA

2. Monitor for signs of angioedema (mouth or throat edema, difficulty breathing). If signs present:
   - Stop tPA
   - Treat according to allergic reaction protocol
   - Notify medical control

3. Monitor for other bleeding or hematomas (infusion/puncture sites, urine, emesis).
   If bleeding present, apply direct pressure to any sites and notify medical control.

Additional instructions:

☐ _____

☐ _____

☐ _____

Physician Signature/Title _____

Date _____ **Time** _____

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