

STROKE ISCHEMIC THROMBO-CC

Stroke Orders Ischemic, Thrombolytic Critical Care

VTE PROPHYLAXIS ORDERS (PRINT VERSION)

A VTE Risk Assessment and appropriate treatment or a contraindication to treatment is required for all patients.

Patient has the following VTE Risk:

- Low VTE Risk (No prophylaxis needed)
- Moderate VTE Risk (Please Order EITHER mechanical (SCD) or pharmacological prophylaxis)
- High VTE Risk (Please Order BOTH mechanical (SCD) or pharmacological prophylaxis)

Contraindications

Reason for withholding Mechanical VTE prophylaxis (check one)

- | | | |
|--|---|---|
| <input type="checkbox"/> Hypervolemia | <input type="checkbox"/> Congestive/Chronic heart failure | <input type="checkbox"/> Sensory neuropathy |
| <input type="checkbox"/> Edema of leg | <input type="checkbox"/> Palliative care | <input type="checkbox"/> Refusal of treatment by patient |
| <input type="checkbox"/> Surgical procedure on lower extremity | <input type="checkbox"/> Injury of lower extremity | <input type="checkbox"/> At risk for falls |
| <input type="checkbox"/> Comfort measures | <input type="checkbox"/> Dermatitis | <input type="checkbox"/> Skin graft disorder |
| <input type="checkbox"/> Amputee-limb | <input type="checkbox"/> Peripheral ischemia | <input type="checkbox"/> Peripheral vascular disease |
| <input type="checkbox"/> Deep vein thrombosis of lower extremity | <input type="checkbox"/> Deformity of leg | <input type="checkbox"/> History of occlusive arterial disease of lower extremity |
| <input type="checkbox"/> Suspected deep vein thrombosis | <input type="checkbox"/> Treatment not tolerated | |
| | <input type="checkbox"/> Vascular insufficiency of limb | |

Reason for withholding Pharmacologic VTE prophylaxis (check one)

- | | | |
|---|--|--|
| <input type="checkbox"/> Blood coagulation disorders | <input type="checkbox"/> Palliative care (for end of life) | <input type="checkbox"/> At risk for falls |
| <input type="checkbox"/> Bleeding or at risk for bleeding | <input type="checkbox"/> Comfort measures | <input type="checkbox"/> Hemorrhagic cerebral infarction |
| <input type="checkbox"/> Renal impairment | <input type="checkbox"/> Anticoagulant allergy | <input type="checkbox"/> Medications refused |
| <input type="checkbox"/> Anticoagulation not tolerated | <input type="checkbox"/> Platelet count below ref | |

- Leg compression device to be placed within 4 hours

**For stroke patients prophylaxis against VTE with subcutaneous LMWH should be used if the patient's level of activity is bed rest on the second hospital day. [Evidence](#)

- Enoxaparin (Lovenox) 40 mg SubQ daily @ 2100. Start on hospital day 2 but no sooner than 24 Hrs after thrombolytic. Pharmacy to adjust per renal dosing protocol. May use baseline PLTS if today's PLTS not yet available.

DIAGNOSIS: _____

ADMIT

- Admit as inpatient. Preferred unit: Medical ICU


CODE STATUS


REMINDER: For DNAR status complete separate DNAR Physician Order Set

SKIN TREATMENT AND PREVENTION

- Initiate designated skin set: If Braden score of 18 or less initiate Skin Treatment and Prevention short set. For any skin issues initiate designated skin order set(s).

NURSING

REMINDER: For patients with a contraindication to anticoagulant therapy, use mechanical prophylaxis with SCD if the patient's level of activity is bed rest on the second hospital day  [Evidence](#)

REMINDER: For patients with a contraindication to anticoagulant therapy and not ambulating independently, use mechanical prophylaxis with SCD  [Evidence](#)

- Initiate full NIH Stroke Scale on admission and Q shift

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ZYNX- Stroke Thrombo ADM

MEDITECH NAME: STROKE ISCHEMIC THROMBO-CC

MEDITECH MNEMONIC: NE.STIT

Sponsor: Liz Hahn/Dauben

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- Initiate abbreviated NIH Stroke Scale Q 15 minutes x 8, Q 30 minutes x 12, then Q 1 Hr x 16
- Vital signs other than routine Q 15 minutes x 8, Q 30 minutes x 12, then Q 1 Hr x 16
- RN bedside swallow screen on admission prior to any Po intake [Evidence](#)
- Orthostatic BP one time only-prior to first time getting out of bed
- Notify Neurologist (or if no neurologist then attending) if
 - change in neuro status,
 - change in level of consciousness,
 - change in pupil size/reactivity,
 - worsening headache,
 - unexplained vomiting,
 - increased agitation
- Blood glucose monitoring (BGM) on admission one time only.
If > 150 mg/dL, notify MD to initiate subcutaneous insulin orders.
- Blood glucose monitoring (BGM)-Q 6 hours while patient NPO
- Blood glucose monitoring (BGM)-AC and HS
- Insert nasogastric or orogastric tube (NGT/OT)
- Insert post pyloric tube
- Insert indwelling urinary catheter; Reason: Neurogenic Bladder
- Aspiration precautions
- Apply Telemetry Monitoring (Paper only)
- May Leave Floor without Telemetry (Paper only)

ACTIVITY

REMINDER: If there are no restrictions nursing will ambulate the patient at least four times a day per policy PC-112

- Activity Restrictions: BED REST UNTIL CLEARED BY NEUROLOGIST
- Elevate head of bed at 30 degrees and maintain head/neck midline in neutral position

RESPIRATORY

- Apply Oxygen with defined parameters to maintain oxygen saturation $\geq 90\%$

NUTRITION

REMINDER: Patients with ischemic stroke should undergo a swallowing study before taking any foods, fluids, or medications by mouth [Evidence](#)

- NPO until swallow screen/evaluation
- Cardiac 2 Gm Na diet
- Diabetic diet 1800
- Diabetic diet 2200

IV FLUIDS

- Sodium Chloride 0.9% IV to run at 100 mL/Hr. [Evidence](#)
- Saline lock IV if tolerating Po fluids, Temp < 100.4° F, HCT > 30, and PCA not required. Saline Flush peripheral IV with 2 mL IV Push Q 8 Hrs and after each IV medication dose. RN to contact Pharmacy to DC IV Fluid order(s) when IV Fluid is converted to saline lock.

MEDICATIONS

Analgesic/Antipyretic medications: Mild Pain/Fever [Evidence](#)

- Acetaminophen (Tylenol) 650 mg Po Q 6 Hrs Prn mild pain (scale 1-3) or Temp > 99.6 °F or 37°C.
Total Acetaminophen not to exceed 4,000 mg/24 Hrs
- Acetaminophen (Tylenol) liquid 650 mg NG Q 6 Hrs Prn mild pain (scale 1-3) or Temp > 99.6 °F or 37°C.
If patient is unable to take Po acetaminophen (if ordered) and has an NG tube.
Total Acetaminophen not to exceed 4,000 mg/24 Hrs
- Acetaminophen (Tylenol) suppository 650 mg PR Q 6 Hrs Prn mild pain (scale 1-3) or Temp > 99.6 °F or 37°C.
If patient is unable to take Po/NG acetaminophen (if ordered). *Total Acetaminophen not to exceed 4,000mg/24 Hrs*

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Anticoagulant medications: Vitamin K antagonists [Evidence](#)

REMINDER: For patients with cerebrovascular disease (eg, history of TIA or stroke) associated with nonrheumatic atrial fibrillation, atrial flutter, or prosthetic heart valves, administer a vitamin K antagonist NO SOONER THAN DAY 2. [Evidence](#)

REMINDER: For patients with noncardioembolic TIA or ischemic stroke who have no other indications for anticoagulation, do not use warfarin. [Evidence](#)

Anticoagulant medications: Platelet Inhibitors/Anti-thrombotics *Physician to select **ONE** dose only* [Evidence](#)

REMINDER: Aspirin should be administered by end of hospital day 2 but NO SOONER THAN 24 HOURS after thrombolytic and prescribed upon discharge for patients who do not have an indication for warfarin. [Evidence](#)

Antithrombotic contraindicated:

Reasons to withhold Antithrombotic agents

- | | | |
|---|--|---|
| <input type="checkbox"/> Allergy to or complication related to antithrombotic | <input type="checkbox"/> Intracranial surgery/biopsy | <input type="checkbox"/> Bleeding disorder |
| <input type="checkbox"/> Rule out bleed | <input type="checkbox"/> Planned surgery | <input type="checkbox"/> Peptic ulcer disease |
| <input type="checkbox"/> Intolerance in past | <input type="checkbox"/> Hemorrhage | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> Bleeding risk | |
- Aspirin 325 mg Po daily once cleared by bedside swallow screen. Start on hospital day 2 but no sooner than 24 Hrs after thrombolytic. RN to contact pharmacy to enter Aspirin 325 mg NG daily order if pt unable to take Po and has an NG tube. RN to contact pharmacy to enter Aspirin suppository 300 mg PR daily order if pt unable to take Po/NG.
- Aspirin 162 mg Po daily once cleared by bedside swallow screen. Start on hospital day 2 but no sooner than 24 Hrs after thrombolytic. RN to contact pharmacy to enter Aspirin 162 mg NG daily order if pt unable to take Po and has an NG tube. RN to contact pharmacy to enter Aspirin suppository 150 mg PR daily order if pt unable to take Po/NG.
- Aspirin 81 mg Po daily once cleared by bedside swallow screen. Start on hospital day 2 but no sooner than 24 Hrs after thrombolytic. RN to contact pharmacy to enter Aspirin 81 mg NG daily order if pt unable to take Po and has an NG tube. RN to contact pharmacy to enter Aspirin suppository 150 mg PR daily order if pt unable to take Po/NG.

Cardiac medications: Anti-hypertensives – (Preferred Treatment) [Evidence](#)

- LaBETalol (Trandate) 20 mg IV Push over 2 mins Q 10 min Prn SBP > 180 or DBP > 105. If SBP remains > 180 or DBP remains > 105 after 60 mg (3 doses), contact MD for alternative orders. Hold for HR < 50 and notify MD. Maximum total dose = 300 mg/24 Hrs.
- HydrALAZINE (Apresoline) 10 mg IV push over 2 mins Q 1 Hr Prn SBP > 180 or DBP > 105 if unable to give laBETalol. ** For Critical Care, Med Tele, and Cardiac Renal use only. DC when transferred out of these units.**
- LaBETalol (Trandate) 20 mg IV Push over 2 mins x 1 dose Prn SBP > 180 or DBP > 105 as a loading dose prior to starting a LaBETalol continuous IV infusion.
- LaBETalol (Trandate) 200 mg/200 mL NS continuous IV infusion, start at 2 mg/min and titrate by 0.5 – 1 mg/min Q 10 mins up to a max of 8 mg/min to maintain SBP < 180 or DBP < 105. Titrate down by 0.5-1 mg/min Q 15 mins. Hold for HR < 50 and notify MD. ** For Critical Care use only. DC when transferred out of Critical Care unit.**

Cardiac medications: Anti-hypertensives–(Alternative Treatment) *Physician to select **ONE** drug only* [Evidence](#)

- Nitroprusside (Nipride) 50 mg/250 mL D5W continuous IV infusion, start at 0.5 mCg/Kg/min and titrate by 0.5 mCg/Kg/min Q 3 – 5 mins up to a max of 10 mCg/Kg/min to maintain SBP < 180 or DBP < 105. Titrate down by 0.5 – 0.75 mCg/Kg/min Q 15 mins. ** For Critical Care use only. DC when transferred out of Critical Care unit.**
- NiCARDipine (Cardene) 25 mg/250 mL NS continuous IV infusion, start at 5 mg/Hr and titrate by 2.5 mg/Hr Q 15 mins up to a max of 15 mg/Hr to maintain SBP < 180 or DBP < 105. Titrate down by 2.5 mg/Hr Q 15 mins. Hold for HR < 50 and notify MD. ** For Critical Care use only. DC when transferred out of Critical Care unit.**

Cardiac medications: Statins

Statin Contraindication

Reasons to withhold Statin therapy

- | | | |
|--|--|---|
| <input type="checkbox"/> Hepatic Failure | <input type="checkbox"/> Inflammatory Disease of liver | <input type="checkbox"/> No evidence of atherosclerosis |
| <input type="checkbox"/> Palliative Care | <input type="checkbox"/> Patient in Clinical Trial | <input type="checkbox"/> Medical Contraindication |
| <input type="checkbox"/> Patient refuses Treatment | <input type="checkbox"/> Rhabdomyolysis | <input type="checkbox"/> Statin Not Tolerated |
- Simvastatin (ZoCOR) 20 mg Po daily in the evening

GI medications: Anti-emetics

- Ondansetron (Zofran) 4 mg IV Push Q 12 Hrs Prn N&V. If ineffective after 30 mins, give proCHLORperazine (if ordered). May give IM if no IV access.
- ProCHLORperazine (Compazine) 10 mg IV Push Q 6 Hrs Prn N&V. If ondansetron Prn is also ordered, give ondansetron first. If ondansetron ineffective after 30 mins, give proCHLORperazine as ordered. May give IM if no IV access.

GI medications: Stress Ulcer Prophylaxis/Antacids

- Famotidine (Pepcid) 20 mg IV Push BID. RN to contact pharmacy to enter Po order when pt is able to take Po. Pharmacy to adjust per renal dosing protocol.

GI medications: Laxatives/Stool Softeners

- Docusate sodium (Colace) 100 mg Po BID. Hold for loose stools.
- Maalox Plus (aluminum/magnesium/simethicone) 30 mL Po Q 4 Hrs Prn indigestion (product contains magnesium salt)
- Milk of Magnesia (MOM) 30 mL Po Q 6 Hrs Prn constipation (product contains magnesium salts)
- Bisacodyl (Dulcolax) suppository 10 mg PR daily Prn constipation if Milk of Magnesia (MOM) (if ordered) not effective.
- Fleet enema adult 1 bottle (133 mL) PR daily Prn constipation if Milk of Magnesia (MOM) (if ordered) and Bisacodyl (Dulcolax) (if ordered) not effective. (product contains phosphate salts)

Endocrine medications: Diabetic Therapy

REMINDER: For Subcutaneous Insulin Orders - Use Subcutaneous Insulin Short Set/Order Form

Other medications: _____

***All labs/diagnostics will be drawn/done routine now unless otherwise specified**

LABORATORY - Cardiac Markers

Troponin- In Am

LABORATORY – Hematology

- Complete blood count (CBC) – In AM [Evidence](#)
- Erythrocyte sedimentation rate (ESR) – In AM

LABORATORY - Chemistry

- Lipid profile- In Am
- Basic metabolic panel (BMP) – In AM
- Comprehensive metabolic panel (CMP)–In AM
- Hemoglobin A1c (HbA1c)- In AM
- Homocysteine, serum (HMCY) - In AM
- C reactive protein (CRP) - In AM
- Thyroid stimulating hormone (TSH) - In AM

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LABORATORY - Coagulation

REMINDER: Avoid the routine ordering of tests to identify coagulation defects (e.g., activated protein C resistance/factor V Leiden mutation, anticardiolipin antibodies, lupus anticoagulant, protein C deficiency, protein S deficiency) [Evidence](#)

- Factor 2 gene mutation 20210 – In AM
- Hypercoag panel (HYPCGI)- In AM

LABORATORY - Immunology

- Anti Nuclear antibody (ANA) - In AM
- Anti phospholipid syndrome antibody – In AM

LABORATORY - Serology

- Rapid plasma reagin (RPR) - In AM

DIAGNOSTICS - Cardiology

- Electrocardiogram 12-lead EKG; Reason for exam: [Ischemic Stroke](#)
- Echocardiogram, transthoracic; Reason for exam: [Ischemic Stroke](#)

DIAGNOSTICS – Radiology

- Chest X-ray 1 View (CXR) Portable – STAT; Reason for exam: [Evaluate Infiltrates](#)
- Chest X-ray 2 View (CXR) Portable – STAT; Reason for exam: [Evaluate Infiltrates](#)

DIAGNOSTICS - CT

- CT Angiography, neck with and without contrast. Reason for exam: [Ischemic Stroke](#)
- CT Angiography, head with and without contrast. Reason for exam: [Ischemic Stroke](#)

DIAGNOSTICS

REMINDER: If CT Angio of the brain/head was already done in ED MRA of the neck may not be indicated

- MRI Angiography, cerebral without contrast. Reason: [Ischemic Stroke](#)
- MRI Angiography neck carotid without contrast. Reason: [Ischemic Stroke](#)
- MRI Brain without contrast. Reason: [Ischemic Stroke](#)

DIAGNOSTICS - Ultrasonography

REMINDER: If CT Angio of the brain/head was already done in ED carotid ultrasound may not be indicated

- Ultrasound carotid Doppler (VIH), bilateral; Reason: [Ischemic Stroke](#)

MD CONSULTS

REMINDER: Consult specialty referral (Neurology, Cardiology)

- Consult MD _____
- Consult MD _____

REQUEST FOR SERVICE

- Consult Occupational Therapy evaluation and treatment for activities of daily living (ADLs)
- Consult Physical Therapy evaluation and treatment for strengthening and mobility
- Notification for Outpatient Physical Rehabilitation Referral
- Consult Speech Therapy for swallow evaluation and treatment
- Consult Speech Therapy for speech evaluation and treatment
- Consult Case Management
- Nutritional consult
- Consult Social Services

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