Physician Orders ADULT: Neuro SAH Post Op Plan

Initiate Orders Phase
Care Sets/Protocols/PowerPlans
☐ Initiate Powerplan Phase
  
  Phase: Neuro SAH Post Op Phase, When to Initiate: ____________________________

☐ Initiate Powerplan Phase
  
  Phase: Mechanically Ventilated Patients (Vent Bundle) Phase, When to Initiate: __________________

Neuro SAH Post Op Phase
Admission/Transfer/Discharge
☐ Transfer Pt within current facility

Vital Signs
☐ Vital Signs w/Neuro Checks
  
  Monitor and Record Resp Rate Monitor and Record Blood Pressure Monitor and Record Pulse,
  q1h(std)

  Comments: Utilize the National Institutes of Health Stroke Scale (NIHSS)

☐ Vital Signs
  
  Monitor and Record Temp, q4h(std)

Activity
☐ Bedrest
☐ Out Of Bed
  Up Ad Lib
☐ Out Of Bed
  In chair for meals
☐ Ambulate

Food/Nutrition
☐ NPO

  Instructions: NPO except for medications, until swallow screen passed

☐ Regular Adult Diet
☐ Consistent Carbohydrate Diet

  Caloric Level: 1800 Calorie, Insulin: [ ] No Insulin [ ] Short Acting
  [ ] Intermediate [ ] Long Acting [ ] Short and Intermediate [ ] Short and Long;

  Renal Patient: [ ] No [ ] Yes, on dialysis [ ] Yes, not on dialysis

Patient Care
☐ VTE Intracranial/Intraocular SURGICAL Prophylaxis Plan(SUB)*
☐ Code Status
☐ Weight

  Routine, QODay, Weigh patient every other day

☐ Elevate Head Of Bed
  30 degrees at all times
☐ O2 Sat Monitoring NSG
  [ ] Routine, q4h(std) (DEF)*
  [ ] Routine, q2h(std)
  [ ] Routine, q1h(std)

☐ Seizure Precautions
  Routine

☐ Increased ICP Precautions
  Routine

☐ Intake and Output
  Routine, q4h(std)

☐ Advance Diet As Tolerated
Physician Orders ADULT: Neuro SAH Post Op Plan

☐ Nasogastric Tube Insert
  \textit{Routine}

☐ Nasogastric Tube
  \textit{Action Type:} for medication administration and nutrition

☐ Oral Gastric Tube Insert

☐ Oral Gastric Tube Care
  \textit{Action Type:} for medication administration and nutrition

☐ INT Insert/Site Care

☐ Foley Care
  \textit{q-shift}

☐ Continue Foley Per Protocol
  \textit{Reason:} Vent & Paralyzed, Condom Cath No Option

☐ Whole Blood Glucose Nsg
  \textit{q6h, If tolerating PO or intermittent feeds, may decrease frequency of Whole Blood Glucose Nsg to}
  

☐ Nursing Communication
  \textit{Swallow Screen and Stroke Education complete and charted in Cerner}

☐ Instruct/Educate
  \textit{Instruct: Patient and Family, Method: Provide Pamphlet, Topic: Stroke, Patient Education Pack with}
  
  \textit{smoking cessation education. Give to patient.}

☐ Ventriculostomy Setup To Bedside

☐ Neuro Arteriogram Post Procedure Plan(SUB)*

☐ Neuro Ventriculostomy Plan(SUB)*

☐ Depression Screening
  \textit{T;N}

☐ Central Line

\underline{Respiratory Care}

☐ Nasal Cannula
  
  \textit{2 L/min, Special Instructions: titrate to keep O2 saturation greater than or equal to 94\% (DEF)*}

  \textit{2 L/min, Special Instructions: titrate to keep O2 saturation greater than or equal to 92\%}

☐ Aerosol Facemask
  
  \textit{40 \%, Special Instructions: titrate to keep O2 saturation greater than or equal to 94\% (DEF)*}

  \textit{40 \%, Special Instructions: titrate to keep O2 saturation greater than or equal to 92\%}

\textit{NOTE: If a mechanical ventilator is needed please order the Mechanically Ventilated Patient Phase (Vent}
  
  \textit{Bundle Phase) in this Plan. (NOTE)*}

\underline{Continuous Infusion}

☐ Sodium Chloride 0.9%
  
  \textit{1,000 mL, IV, mL/hr}

\underline{Medications}

☐ Neuro Antihypertensive Acute PRN Meds Plan(SUB)*

☐ Insulin SENSITIVE Sliding Scale Plan(SUB)*

☐ Insulin STANDARD Sliding Scale Plan(SUB)*

☐ Insulin RESISTANT Sliding Scale Plan(SUB)*

☐ Neuro Sodium Support Plan(SUB)*

☐ \textbf{+1 Hours} ondansetron
  
  \textit{4 mg, Injection, IV Push, q6h, PRN Nausea/Vomiting}

☐ \textbf{+1 Hours} acetaminophen
  
  \textit{650 mg, Tab, PO, q6h, PRN Mild Pain or Fever}
Physician Orders ADULT: Neuro SAH Post Op Plan

Comments: PRN mild pain or fever greater than 38 degrees C

☐ +1 Hours acetaminophen
   650 mg, Supp, PR, q6h, PRN Mild Pain or Fever
   Comments: if unable to tolerate PO, PRN mild pain or fever greater than 38 degrees C
   Choose ONE pain medication below for moderate pain:(NOTE)*

☐ +1 Hours acetaminophen-oxyCODONE 325 mg-5 mg oral tablet
   1 tab, Tab, PO, q4h, PRN Pain, Moderate (4-7)

☐ +1 Hours acetaminophen-HYDROcodone 325 mg-5 mg oral tablet
   1 tab, Tab, PO, q4h, PRN Pain, Moderate (4-7)

☐ +1 Hours morphine
   2 mg, Injection, IV Push, q1h, PRN Pain, Severe (8-10)

☐ +1 Hours niMODipine
   60 mg, Cap, PO, q4h, Routine, (for 21 day )
   Comments: HOLD for SBP less than 100 mmhg.

☐ +1 Hours bacitracin/neomycin/polymyxin B topical
   1 application, Ointment, TOP, bid, Routine, Apply to wound

Labaratory

☐ Sodium Level
   Time Study, T;N, q6h, Type: Blood

☐ CBC
   Routine, T+1;0200, q24h, Type: Blood

☐ BMP
   Routine, T+1;0200, once, Type: Blood

☐ Phosphorus Level
   Routine, T+1;0200, q24h, Type: Blood

☐ Magnesium Level
   Routine, T+1;0200, q24h, Type: Blood

☐ Osmolality Serum
   Time Study, T;N, q6h, Type: Blood

☐ Prothrombin Time
   STAT, T;N, once, Type: Blood

☐ Hemoglobin A1C
   STAT, T;N, once, Type: Blood

☐ Troponin-I
   STAT, T;N, once, Type: Blood

☐ Lipid Profile
   Routine, T;N, once, Type: Blood

Diagnositic Tests

☐ EKG
   Start at: T;N, Priority: Routine, Reason: Other, specify, Subarachnoid Hemorrhage

☐ Chest 1 View
   T+1;0800, Reason for Exam: Other, Enter in Comments, Routine, Portable
   Comments: Reason: Subarachnoid Hemorrhage

☐ CT Brain/Head WO Cont
   T;N, Reason for Exam: Other, Enter in Comments, Stat, Stretcher
   Comments: Reason: Subarachnoid Hemorrhage, complete within 2 hours

☐ CT Brain/Head WO Cont
   T+1;0800, Reason for Exam: Other, Enter in Comments, Routine, Stretcher
   Comments: Reason: Subarachnoid Hemorrhage

☐ CT Angio Head W/WO Cont W Imag Post Prc Plan(SUB)*
Physician Orders ADULT: Neuro SAH Post Op Plan

☐ Cath Lab Request to Schedule
  Stat (DEF)*
  Comments: Neuro 4 vessel arteriogram
  Routine
  Comments: Neuro 4 vessel arteriogram

☐ TTE Echo W/Contrast or 3D if needed
  Priority: Routine

Consults/Notifications/Referrals
☐ Notify Physician-Once
  Notify For: of room number on arrival to unit
☐ Notify Physician For Vital Signs Of
  Notify: Physician, Celsius Temp > 38.0, for O2 sat < 92% after O2 therapy
☐ Notify Resident-Continuing
  Notify: Neurosurgery resident, Notify For: For: any change in neuro status or questions

☐ Physician Consult
  Reason for Consult: For: intensive care management and/or ventilator management

☐ Physician Consult
  Reason for Consult: For: intensive care management and/or ventilator management

☐ Physician Group Consult
  Group: UT Neuro ICU, Reason for Consult: For: intensive care management and/or ventilator management

☐ Occupational Therapy Initial Eval and Tx
☐ Physical Therapy Initial Eval and Tx
☐ Speech Therapy Initial Eval and Tx
  for: BSE(Bedside Swallow Eval)
☐ Case Management Consult
  Routine, Reason: Discharge Planning
☐ Medical Social Work Consult
  Routine, Reason: Assistance at Discharge

Mechanically Ventilated Patients Phase
Non Categorized

R Mechanically Ventilated Pt (Vent Bundle) Care Track
T;N

Patient Care
☐ Elevate Head Of Bed
  30 degrees or greater if systolic blood pressure is greater than 95 mmHg
☐ Reposition ETT (Nsg)
  QDay, Rotate tube from one side to the other to reduce the risk of skin breakdown.
☐ ETT Subglottic Suction
  ☐ Low Continuous, 20mmHg, Applies to ETT with the Hi-Lo suction capability. (DEF)*
  ☐ Low Intermittent, 40mmHg, Applies to ETT with the Hi-Lo suction capability.
  ☐ Low Intermittent, 60mmHg, Applies to ETT with the Hi-Lo suction capability.
  ☐ Low Intermittent, 80mmHg, Applies to ETT with the Hi-Lo suction capability.
  ☐ Low Intermittent, 100mmHg, Applies to ETT with the Hi-Lo suction capability.
  ☐ Low Intermittent, 120mmHg, Applies to ETT with the Hi-Lo suction capability.

☐ Mouth Care
  Routine, q2h(std)

☐ Nursing Communication
  Call MD if higher than any of the following maximum doses of medications is required. LORazepam

NEURO Neuro SAH Post Op Plan 21023 QM0611 PP Rev102919  Page 4 of 7
Physician Orders ADULT: Neuro SAH Post Op Plan

6 mg in 3 hours, Fentanyl 500 mcg/hr, propofol 100 mcg/kg/min, midazolam 7mg/hr

- Nursing Communication
  If SAS goal not met in 6 hours, call MD for further orders

- Nursing Communication
  If receiving haloperidol, patient must be on cardiac monitor - call MD for QTc prolongation greater than or equal to 500 msecs and HOLD haloperidol

- Nursing Communication
  Once SAS goal is met initially, reassess and document SAS score q2hrs

- Nursing Communication
  If the patient is on sedation medication other than propofol, begin turning off the sedation medications at 8am for the sedation vacation process

- Nursing Communication
  Notify Respiratory for Weaning Assessment at 8am if a Vacation Sedation is initiated,

Respiratory Care
- Mechanical Ventilation
- Reposition ETT (Nsg)
  QDay, Rotate tube from one side to the other to reduce the risk of skin breakdown.

Medications
- +1 Hours docusate
  100 mg, Liq, NG, bid, Routine
  Comments: HOLD for diarrhea

- +1 Hours famotidine
  20 mg, Tab, NG, bid, Routine
  Comments: reduce to 20 mg daily if creatinine clearance is less than 50 mL/min

- +1 Hours famotidine
  20 mg, Injection, IV Push, bid, Routine
  Comments: reduce to 20 mg daily if creatinine clearance is less than 50 mL/min

- +1 Hours pantoprazole
  40 mg, Granule, NG, QDay, Routine

- +1 Hours pantoprazole
  40 mg, Injection, IV Push, QDay, Routine

- +1 Hours Chlorhexidine For Mouthcare 0.12% Liq
  15 mL, Liq, Mucous Membrane, bid, Routine
  Comments: For mouthcare at 0800 and 2000.

- VTE MEDICAL Prophylaxis Plan(SUB)*
- VTE SURGICAL Prophylaxis Plan(SUB)*
- Sequential Compression Device Apply
  T:N, Apply to Lower Extremities

Sedation
Refer to Patient Care Section/Nursing communication orders for medication monitoring parameters.(NOTE)*
Choose Sedation Goal per Riker Sedation Agitation Scale (SAS) Goal of 3-4 recommended (NOTE)*

- Sedation Goal per Riker Scale
  - Goal: 3 (Sedated) (DEF)*
  - Goal: 4 (Calm/Cooperative)

- Propofol Orders Plan(SUB)*

- +1 Hours LORazepam
  1 mg, Injection, IV Push, q30min, PRN Other, specify in Comment, Routine, Indication: NOT for Violent Restraint
  Comments: To maintain SAS goal (Maximum of 6 mg in a 3 hr period). If patient is over-sedated, hold dose until SAS goal achieved. Call MD if patient requires more than 20
Physician Orders ADULT: Neuro SAH Post Op Plan

mg/day.

☐ +1 Hours midazolam
   1 mg, Injection, IV Push, q1h, PRN Other, specify in Comment, Routine, Indication: NOT for Violent Restraint
   Comments: To maintain SAS goal. If patient is over-sedated, hold dose until SAS goal achieved. Call MD if patient requires more than 20 mg/day.

☐ +1 Hours midazolam 1mg/mL/NS 50 mL PreMix
   50 mg / 50 mL, IV, Routine, titrate
   Comments: Initiate at 1 mg/hr. Titrate by 0.5mg/hr every 15 minutes until SAS goal achieved. Maximum dose 7 mg/hr

☐ +1 Hours dexmedetomidine infusion (ICU Sedation) (IVS)*
   Sodium Chloride 0.9%
   100 mL, IV, (for 72 hr ), Titrate
   Comments: Concentration: 4 mcg/mL Initiate infusion at 0.2 mcg/kg/hr. Titrate by 0.1 mcg/kg/hr every 30 minutes to reach goal sedation of Riker 3-4. DO NOT BOLUS dose at any time. DO NOT TITRATE MORE FREQUENTLY THAN EVERY 30 MIN.
   dexmedetomidine (additive)
   400 mcg

Pain Management
Choose one of the orders below, morPHINE is not recommended if creatinine clearance is less than 50 mL/min, in liver failure or SBP less than 90mmhg or MAP less than 65 mmhg.(NOTE)*

☐ +1 Hours morphine
   2 mg, Injection, IV Push, q1h, PRN Pain, Moderate (4-7), Routine

☐ +1 Hours HYDROMorphone
   0.5 mg, Injection, IV Push, q1h, PRN Pain, Moderate (4-7), Routine

☐ +1 Hours morphine
   4 mg, Injection, IV Push, q1h, PRN Pain, Severe (8-10), Routine

☐ +1 Hours HYDROMorphone
   1 mg, Injection, IV Push, q1h, PRN Pain, Severe (8-10)

☐ +1 Hours fentaNYL 10 mcg/mL in NS infusion
   2,500 mcg / 250 mL, IV, Routine, Titrate
   Comments: Concentration 10 mcg/mL
   Initial Rate: 50 mcg/hr; Titration Parameters: 50 mcg/hr every 10 min to SAS goal per MD orders. Max Rate: 500 mcg/hr

Refractory Agitation
Place order below for agitation that persists despite adequate sedation & analgesia. Refer to Patient Care Section/Nursing communication orders for medication monitoring parameters.(NOTE)*

☐ +1 Hours haloperidol
   2 mg, Injection, IV Push, q1h, PRN Agitation, Routine, Indication: NOT for Violent Restraint
   Comments: Cardiac monitor required. *If Qtc greater than 500 msec, hold haldoperidol. *If SAS not met in 6 hrs, call MD. Call MD is patient requires more than 20 mg/day.

Sedation Vacation Daily
☑ Sedation Vacation
   qam, see Order Comment:
   Comments: For patients receiving continuous infusions, lighten/discontinue sedation and pain medications at 0800 daily (or more often as indicated by MD/required by nsq unit) until the patient is awake, can follow commands, or until they become uncomfortable or agitated. Resume sedation infusion at 1/2 the previous rate and re-titrare to SAS goal. If SAS goal still achieved without active therapy, do not restart sedation. If patient becomes agitated, resume sedation infusion at 1/2 the previous rate & re-titrare to SAS goal (document on the nursing flow sheet)
### Physician Orders ADULT: Neuro SAH Post Op Plan

- **Ventilator Weaning Trial Medical by RT**

**Consults/Notifications/Referrals**
- **Notify Physician-Continuing**

  *Notify: MD, Notify For: QTc prolongation on cardiac monitor greater than or equal to 500msecs and HOLD haloperidol*

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Physician’s Signature</th>
<th>MD Number</th>
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*Report Legend:*
- **DEF** - This order sentence is the default for the selected order
- **GOAL** - This component is a goal
- **IND** - This component is an indicator
- **INT** - This component is an intervention
- **IVS** - This component is an IV Set
- **NOTE** - This component is a note
- **Rx** - This component is a prescription
- **SUB** - This component is a sub phase, see separate sheet
- **R** - Required order