Physician Orders ADULT: Vascular Surgery AAA Repair Open Post Op Plan

Initiate Orders Phase
Care Sets/Protocols/PowerPlans

- Initiate Powerplan Phase
  Phase: AAA Repair Open Postop Phase, When to Initiate: ______________________
- Initiate Powerplan Phase
  Phase: Mechanically Ventilated Patients Phase, When to Initiate: ______________________

AAA Repair Open Postop Phase

Admission/Transfer/Discharge

- Return Patient to Room
  For patients at University(NOTE)*
- Transfer Pt within current facility
  Level of Care: Critical Care, To SICU
  For patients at Germantown(NOTE)*
- Transfer Pt within current facility
  Level of Care: Critical Care, To CVICU
- Notify Physician-Once
  Notify For: room number upon arrival to unit

Vital Signs

- Vital Signs
  Monitor and Record T,P,R,BP, q1h(std)
- Check Pulses
  - dorsalis pedis pulse bilateral, every hour times 4, then every 4 hours times 4, then every 8 hours (DEF)*
  - femoral pulse bilateral, every hr times 4, then every 4 hr times 4, then every 8 hr.
  - popliteal pulse bilateral, every hr times 4, then every 4 hr times 4, then every 8 hr.
  
Activity

- Bedrest
  until AM
- Bedrest
  For 6 hr
- Out Of Bed
  Up to Chair, T+1;1000
- Ambulate
  tid, T+1;N

Food/Nutrition

- NPO
  Instructions: NPO except for medications
- NPO
  Start at: T;N
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Patient Care
- Ankle Brachial Index Assess
  *to be done by nurse in STAT Postop, then q 4 hr times 4, then qday*
- NGT
  *Suction Strength: Low Intermittent, To wall suction*
- Incentive Spirometry NSG
  *q2h-Awake*
- Turn Cough Deep Breathe
  *q2h-Awake*
- Intake and Output
  *q1h(std)*
- Cardiac Monitoring
  *T;N*
- Foley Insert-Follow Removal Protocol
  *Reason: Postop Surgery Less Than 24 Hrs Ago, to bedside gravity drainage*
  *Comments: Keep foley unless instructed.*
- Daily Weights
  *q24h, T+1;0600*
- Wound Drain Care
  *T;N*
- Central Line Care
  *T;N*
- Central Line May Use
  *Special Instructions: after confirmed via CXR*
- IV Insert/Site Care
  *T;N*

Nursing Communication
- Nursing Communication
  *Maintain Arterial Line*
- Nursing Communication
  *have patient lift legs off bed and check for vigorous ankle and leg movement between leg lifts every hour for 24 hours.*

Respiratory Care
- ABG- RT Collect
  *Stat once*
- Oxygen Saturation-Continuous Monitoring (RT)
  *For 4 hr*
- Oxygen Saturation-Spot Check (RT)
  *q8h(std), Special Instructions: after continuous monitoring complete*

Continuous Infusion
If potassium level greater than or equal to 5 mmoL/L, do not order potassium chloride in IV fluids (NOTE)*

☐ Sodium Chloride 0.9%
   1,000 mL, IV, Routine, 125 mL/hr
☐ Lactated Ringers Injection
   1,000 mL, IV, Routine, 125 mL/hr
☐ Dextrose 5% with 0.45% NaCl and KCl 20 mEq/L
   20 mEq / 1,000 mL, Routine, 125 mL/hr

Medications
☐ VTE Other SURGICAL Prophylaxis Plan (SUB)*
☐ +1 Hours aspirin
   325 mg, DR Tablet, PO, QDay, Routine
☐ +1 Hours aspirin
   300 mg, Supp, PR, QDay, Routine
   Comments: May switch to 325 mg PO once patient is tolerating PO intake
☐ +1 Hours clopidogrel
   75 mg, Tab, PO, QDay, Routine

Anti-infectives
For patients less than 120 kg, choose the following order. (NOTE)*
☐ +1 Hours ceFAZolin
   2 g, IV Piggyback, IV Piggyback, q8h, Routine, (for 5 dose)
   Comments: Time post op dose 8 hours after last dose.
☐ +1 Hours vancomycin
   15 mg/kg, IV Piggyback, IV Piggyback, q12h, Routine, (for 2 dose), Time post op dose 12 hours after last dose.

Analgesics
☐ +1 Hours acetaminophen
   650 mg, Supp, PR, q4h, PRN Pain, Mild or Fever, Routine
   Comments: For temp greater than 38.5 Celsius
☐ +1 Hours acetaminophen
   650 mg, Liq, Tube, q4h, PRN Pain, Mild or Fever, Routine
   Comments: For temp greater than 38.5 Celsius

Analgesics - Severe Pain
☐ PCA - HYDROMorphone Protocol Plan (Adult)(SUB)*
☐ PCA - MorPHINE Protocol Plan (Adult)(SUB)*

Bowel Management
☐ +1 Days docusate-senna 50 mg-8.6 mg oral tablet
   2 tab, Tab, PO, bid, Routine
   Comments: Hold for loose stool or suspected obstruction. Use rescue therapy after first 48 hours if inadequate response to scheduled bowel management.
☐ +1 Days polyethylene glycol 3350
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17 g, Powder, PO, QDay, Constipation, Routine
Comments: Hold for loose stool. Use as first line rescue therapy if no response to scheduled docusate-senna within 24 hours.

+1 Days bisacodyl
10 mg, Supp, PR, QDay, PRN Constipation, Routine
Comments: Hold for loose stool. Use as second line rescue therapy if no response to first line rescue therapy within 24 hours

Antiemetics
ondansetron
4 mg, Injection, IV Push, q6h, PRN Nausea/Vomiting, Routine

Antihypertensives
+1 Hours esmolol 2 g/NS infusion
2 g / 100 mL, IV, Routine, titrate
Comments: Administer via Central line only. Initial Rate: 25 50 mcg/kg/min; Titration Parameters: 50 mcg/kg/min as often as every 5 min to maintain SBP between 120 and 155 mmHg and heart rate <70 beats/minute; Max Rate: 300 mcg/kg/min; Conc: 20 mg/mL BETA BLOCKER

+1 Hours nitroGLYcerin 50 mg/D5W infusion
50 mg / 250 mL, IV, Routine, titrate
Comments: Initial Rate: 5mcg/min ; Titration Parameters: 5mcg/min every 3 min to maintain SBP 120 to 155 mmHg Max Rate: 200 mcg/min; Conc: 200 mcg/mL

+1 Hours labetalol
10 mg, Injection, IV Push, q1h, PRN Other, specify in Comment, Routine
Comments: SBP greater than 160 mmHg

+1 Hours metoprolol
5 mg, Injection, IV Push, q6h, Routine
Comments: SBP greater than 160 mmHg

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

metoclopramide
5 mg, Injection, IV Push, q6h, Routine

K+ Supplementation w/o Renal Impairment
Potassium less than or equal to 3.0(NOTE)*

Nursing Communication
T:N, Place order for Potassium Level 2 hours after completion of Potassium replacement. Continue replacement guidelines until potassium level is greater than or equal to 3.5 mmol/L.

+1 Hours potassium chloride
60 mEq, IV Piggyback, IV Piggyback, prn, PRN Hypokalemia, Routine
Comments: Give if potassium level less than or equal to 3 mmol/L. Run at 10 mEq/hr. Request dose from pharmacy.
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Potassium between 3.1 - 3.5(NOte)*

☐ +1 Hours potassium chloride
  40 mEq, IV Piggyback, IV Piggyback, prn, PRN Hypokalemia, Routine
  Comments: Give if potassium level between 3.1 - 3.5 mmol/L. Run at 10 mEq/hr. Request dose from pharmacy.

Potassium between 3.6 - 3.9(NOte)*

☐ +1 Hours potassium chloride
  20 mEq, IV Piggyback, IV Piggyback, prn, PRN Hyperkalemia, Routine
  Comments: Give if potassium level between 3.6 - 3.9 mmol/L. Run at 10 mEq/hr. Request dose from pharmacy.

Potassium Supplements (CrCl < 30mL/min)

☐ Nursing Communication
  T;N, Place order for Potassium Level 2 hours after completion of Potassium replacement. Continue replacement guidelines until potassium level is greater than or equal to 3.5 mmol/L.
  Comments: Place order for Potassium Level 2 hours after completion of Potassium replacement. Continue replacement guidelines until potassium level is greater than or equal to 3.5 mmol/L.

Potassium less than or equal to 3.0(NOte)*

☐ +1 Hours potassium chloride
  40 mEq, IV Piggyback, IV Piggyback, prn, PRN Hypokalemia, Routine
  Comments: Give if potassium level less than or equal to 3 mmol/L. Run at 10 mEq/hr. Request dose from pharmacy.

Potassium between 3.1 - 3.6(NOte)*

☐ +1 Hours potassium chloride
  20 mEq, IV Piggyback, IV Piggyback, prn, PRN Hypokalemia, Routine
  Comments: Give if potassium level between 3.1 - 3.6 mmol/L. Run at 10 mEq/hr. Request dose from pharmacy.

Mg+ Supplementation w/o Renal Impairment

☐ Nursing Communication
  T;N, Place order for Magnesium Level the morning after completion of Magnesium replacement. Continue replacement guidelines until magnesium level is greater than or equal to 1.8 mg/dL.

Magnesium less 1mg/dL than to 1.5 mg/dL(NOte)*

☐ +1 Hours magnesium sulfate
  4 g, IV Piggyback, IV Piggyback, prn, PRN Hypomagnesemia, Routine, ( infuse over 4 hr )
  Comments: Give if magnesium level less than 1 mg/dL. Request dose from pharmacy.

Magnesium between 1.6 - 1.8 mg/dL(NOte)*

☐ +1 Hours magnesium sulfate
  2 g, IV Piggyback, IV Piggyback, prn, PRN Hypomagnesemia, Routine, ( infuse over 2 hr )
  Comments: Give if magnesium level between 1.6 - 1.8 mg/dL. Request dose from pharmacy.

Magnesium Supplements (CrCl < 30mL/min)

☐ Nursing Communication
  T;N, Place order for Magnesium Level the morning after completion of Magnesium replacement.
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Continue replacement guidelines until magnesium level is greater than or equal to 1.8 mg/dL.
Magnesium less than to 1 mg/dL (NOTE)*

+1 Hours magnesium sulfate
4 g/kg, IV Piggyback, IV Piggyback, prn, PRN Hypomagnesemia, Routine, (infuse over 4 hr)
Comments: Give if magnesium level less than 1 mg/dL. Request dose from pharmacy.

+1 Hours magnesium sulfate
2 g, IV Piggyback, IV Piggyback, prn, PRN Hypomagnesemia, Routine, (infuse over 2 hr)
Comments: 1 - 1.6 mg/dL. Request dose from pharmacy.

Laboratory
- CBC w/o Diff
  STAT, T;N, once, Type: Blood
- CMP
  STAT, T;N, once, Type: Blood
- Magnesium Level
  STAT, T;N, once, Type: Blood
- Phosphorus Level
  STAT, T;N, once, Type: Blood
- PT/INR
  STAT, T;N, once, Type: Blood
- Amylase Level
  STAT, T;N, once, Type: Blood
- +4 Hours CBC
  Time Study, T;N+240, q4h x 24 hr, Type: Blood
- +4 Hours BMP
  Time Study, T;N+240, q4h x 24 hr, Type: Blood
- Magnesium Level
  Routine, T+1;0400, once, Type: Blood
- Phosphorus Level
  Routine, T+1;0400, once, Type: Blood
- PT/INR
  Routine, T+1;0400, once, Type: Blood
- Lactate Level
  Routine, T+1;0400, once, Type: Blood
- PTT
  Routine, T+1;0400, once, Type: Blood

Diagnostic Tests
- Abd Sing
  AP VW
  T;N, Reason for Exam: Other, Enter in Comments, Stat
  Comments: Evaluate NGT placement.
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☑ Abd Sing  AP VW  
  *T+1:0800, Reason For Exam Other, Enter in Comments, Routine*  
  Comments: Evaluate NGT placement.

☑ Abd Sing  AP VW  
  *T+2:0800, Reason For Exam Other, Enter in Comments, Routine*  
  Comments: Evaluate NGT placement.

☑ Chest 1VW Frontal  
  *T;N, Stat*  

☑ EKG  
  *Start at: T;N, Priority: Routine*

**Consults/Notifications/Referrals**

For patients at University(NOTE)*

☐ Physician Group Consult  
  *Group: UTMP Pulmonary - AMB, Reason for Consult: Critical Care Management*

For patients at Germantown(NOTE)*

☐ Physician Group Consult  
  *Group: Methodist Germantown Hospitalist Group, Reason for Consult: Critical Care Management*

☐ Physical Therapy Initial Eval and Tx  
  *Special Instructions: ROM/Strengthening/Endurance*

☐ Occupational Therapy Initial Eval and Tx  
  *Special Instructions: ROM/Strengthening/Endurance*

☐ Diabetic Teaching Consult  
  *Start at: T;N*

☑ Notify Physician For Vital Signs Of  
  *BP Systolic > 160, BP Systolic < 120, Celsius Temp < 38.5, Heart Rate > 100, Heart Rate < 50, Urine output less than 75 mL/hr for 1st 24 hr Postop then urine output less than 50 mL/hr, Potassium less than 4 or greater than 5, HCT less than 30*

**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)  
  *T;N, 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)*
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☐ 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
  T;N, Call MD if higher than any of the following maximum doses of medications is required. LORazepam 6 mg in 3 hours, Fentanyl 500 mcg/hr, propofol 100 mcg/kg/min, midazolam 7mg/hr

☐ Nursing Communication
  T;N, If SAS goal not met in 6 hours on haloperidol, call MD for further orders

☐ Nursing Communication
  T;N, 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
  T;N, Once SAS goal is met initially, reassess and document SAS score q2hrs

☐ Nursing Communication
  T;N, 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
  T;N, Notify Respiratory for Weaning Assessment at 8am if a Vacation Sedation is initiated,

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

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

☐ +1 Hours famotidine
  20 mg, Oral Susp, Tube, 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

☐ pantoprazole
  40 mg, Granule, NG, QDay, Routine

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

- 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), T;N

- Propofol Orders Plan(SUB)*

+1 Hours LORazepam
1 mg, Injection, IV Push, q30min, PRN Other, specify in Comment, Routine
Comments: to maintain SAS goal (Maximum of 6 mg in a 3 hr period). If patient is over sedated, hold dose until appropriate SAS 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 0.5 mg/hr every 15 minutes until SAS goal achieved. Maximum dose 7 mg/hr

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
4 mg, Injection, IV Push, q1h, PRN Pain, Moderate (4-7), Routine

+1 Hours HYDROmorphine
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
Comments: Cardiac monitor required. *If Qtc greater than 500 msec, hold haloperidol. *If SAS not met in 6 hrs, call MD. Call MD if patient requires more than 20 mg/day.

Sedation Vacation Daily

Sedation Vacation
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qam, see Order Comment; T;N

Comments: For patients receiving continuous infusions, lighten/discontinue sedation and pain medications at 0800 daily (or more often as indicated by MD/required by nsg 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-titrate 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-titrate to SAS goal (document on the nursing flow sheet)

☑ Ventilator Weaning Trial Medical by RT

T;N

Consults/Notifications/Referrals

☑ Notify Physician-Continuing

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

Date _______________ Time _______________ Physician’s Signature ____________________________ MD Number ________________________

*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