Physician Orders ADULT: Vascular Surgery AAA Endovascular Post Op Plan

Initiate Orders Phase
Care Sets/Protocols/PowerPlans

☐ Initiate Powerplan Phase
  Phase: AAA Endovascular PACU Phase, When to Initiate:_____________________

☐ Initiate Powerplan Phase
  Phase: Mechanically Ventilated Patients Phase, When to Initiate:_____________________

☐ Initiate Powerplan Phase
  Phase: AAA Endovascular Post Op Phase, When to Initiate:_____________________

AAA Endovascular PACU Phase
Respiratory Care
  Ą ISTAT Blood Gases (RT Collect)

Laboratory
  Ą CBC w/o Diff
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU
  Ą CMP
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU
  Ą Magnesium Level
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU
  Ą Phosphorus Level
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU
  Ą PT/INR
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU
  Ą Amylase Level
    STAT, T;N, once, Type: Blood
    Comments: Draw in PACU

Diagnostic Tests
  ☐ Abd Sing AP VW
    T;N, Reason for Exam: Other, Enter in Comments, Routine
    Comments: Evaluate NGT placement.
  ☐ Chest 1VW Frontal
    T;N, Routine

Mechanically Ventilated Patients Phase
Non Categorized
  R  Mechanically Ventilated Pt (Vent Bundle) Care Track
      T;N

Patient Care
  Ą Elevate Head Of Bed
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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)*
  ☐ 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
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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
- 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 0.5mg/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
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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:, 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-titrated 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-titrated 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

AAA Endovascular Post Op Phase

Admission/Transfer/Discharge

☐ Return Patient to Room
  T;N

  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, T;N

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 hour times 4, then every 4 hours times 4, then every 8 hour
  ☐ popliteal pulse bilateral, every hour times 4, then every 4 hours times 4, then every 8 hours
  ☐ every hour times 4, then every 4 hours times 4, then every 8 hours

Activity

☐ Bedrest
  until AM, T;N
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- Bedrest
  for 6 hours then out of bed to chair, T;N
- +6 Hours Out Of Bed
  Up to Chair after bedrest complete
- +6 Hours Ambulate
  tid, T;N

Food/Nutrition
- Clear Liquid Diet
  Start at: T;N
- Advance Diet As Tolerated
  to a Consistent Carbohydrate Diet
- Consistent Carbohydrate Diet

Patient Care
- Ankle Brachial Index Assess
  to be done by nurse in STAT Postop, then q4hr x 4 then qday
- Incentive Spirometry NSG
  q2h(std)
- 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
- In and Out Cath
  pm For 6 hr, if unable to void in 6 hours and bladder scan greater than 400 mL
- Groin Check
  Routine, q1h(std), For 24 hr
- 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 after 6 hours of bedrest is complete and check for vigorous ankle and
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*leg movement between leg lifts every hour for 24 hours*

**Respiratory Care**
- ISTAT Blood Gases (RT Collect)
  - *Stat once*
- ISTAT Blood Gases (RT Collect)
  - *Routine, T+1,0400*
- 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)*
- Dextrose 5% with 0.45% NaCl and KCl 20 mEq/L
  - 20 mEq / 1,000 mL, *Routine, 125 mL/hr*
- Sodium Chloride 0.9%
  - 1,000 mL, *IV, 125 mL/hr*
- Lactated Ringers Injection
  - 1,000 mL, *IV, 125 mL/hr*

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

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

☐ +1 Hours acetaminophen
   650 mg, Supp, PR, q4h, PRN Pain, Mild or Fever, Routine
   Comments: For temp greater than 38.5 Celsius. If unable to take PO medications

☐ +1 Hours acetaminophen
   650 mg, Liq, Tube, q4h, PRN Pain, Mild or Fever, Routine, Not to exceed 4,000 mg acetaminophen in 24 hours.
   Comments: For temp greater than 38.5 Celsius

Analgesics - Severe Pain

☐ PCA - HYDROmorphine Protocol Plan (Adult)(SUB)*
☐ PCA - MorPHINE Protocol Plan (Adult)(SUB)*

Bowel Management

☐ +1 Hours 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 Hours 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

Order both nitroglycerin and esmolol drips for SBP greater than 160 mmHg(NOTE)*

☐ +1 Hours esmolol 2 g/NS infusion
   2 g / 100 mL, IV, Routine, titrate
   Comments: Administer via Central line only. Initial Rate: 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

☐ 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: Hold for heart rate less than 50 beats/minute or SBP less than 90 mmHg

Gastric

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

10 mg, Injection, IV Push, q6h, Routine

Comments: Change dose to 5mg for CrCl<40 mL/min

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.

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 Hyperkalemia, 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
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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 1 mg/dL than to 1.5 mg/dL (NOTE)*

☐ +1 Days 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. 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, 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 - 1.6 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 - 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 w/o Diff
Time Study, T;N+240, q4h x 24 hr, Type: Blood, Collection Comment: times 24 hours

☑ +4 Hours BMP
Time Study, T;N+240, q4h x 24 hr, Type: Blood, Collection Comment: times 24 hours

☑ PT/INR
Routine, T+1:0400, once, Type: Blood
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☑️ 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.

☑️ Chest 1VW Frontal

T;N, Stat

☑️ EKG

Start at: T;N, Priority: Routine

Consults/Notifications/Referrals

☐ Physician Consult

Reason for Consult: Critical Care Management, Consult UT Pulmonary

☐ Physician Consult

Reason for Consult: Critical Care Management, Consult Mid-South Pulmonary

☑️ 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

Comments: Notify physician for urine output less than 75 mL/hr for first 24 hours Postop then if urine output less than 50 mL/hr, Potassium less than 4 or greater than 5, HCT less than 30%

☑️ Notify Physician-Once

Notify For: For the need to use bisacodyl, second line rescue therapy, if no response to docusate-senna, first line rescue therapy within 24 hours after use for constipation.

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
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Rx - This component is a prescription
SUB - This component is a sub phase, see separate sheet
R-Required order