

Location: _____

Protocol

General

Nursing

Nursing (Required)

☒ **RASS score must be -4 before neuromuscular blockade** Until discontinued, Routine☒ **Assess** Once, Routine

Assess: ○ Critical Care Pain Observation Tool (CPOT) LESS than 2 prior to initiation of neuromuscular blockade

☒ **Obtain baseline Train of Four (TOF) prior to neuromuscular blocking agent initiation (bolus & drip). Label site and use the same site every time TOF performed.** Until discontinued, Routine, Obtain baseline Train of Four (TOF) prior to neuromuscular blocking agent initiation (bolus & drip). Label site and use the same site every time TOF performed.☒ **Nursing communication** Until discontinued, Routine, Obtain Train of Four (TOF) monitoring every 1 hour to achieve and maintain 2 of 4 TOF, then obtain a TOF every 4 hours. Use TOF monitoring in conjunction with clinical assessment.☒ **Nursing communication** Until discontinued, Routine, BIS Monitoring Goal of 40 to 60 for sedation.☒ **Nursing communication** Until discontinued, Routine, Do not hold sedation or perform spontaneous awaken trial while patient on continuous neuromuscular blocking agent.☒ **Patient position:** Until discontinued, Routine, Reposition patient every 2 hours to prevent pressure ulcer.

Position:

Additional instructions:

☒ **Nursing communication** Until discontinued, Routine, Change IV line infusion neuromuscular blocker (cisatracurium or vecuronium) prior to extubation to ensure complete medication elimination/removal.

Medications

Infusions for Sedation

☐ **fentanyl (SUBLIMAZE) or hydromorPHONE (DILAUDID) infusion - HMSJ Only**☐ **fentaNYL (SUBLIMAZE) 1500 mcg/30 mL infusion** 50 , continuous

LESS than desired sedation effect: administer bolus and increase rate by 25mcg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess sedation within 4 hrs

GREATER than desired sedation effect: Decrease rate by 25 mcg/hr and reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 200 mcg/hr fentanyl, contact MD to re-evaluate sedation therapy

☐ **hydromorPHONE (DILAUDID) 50 mg/50 mL in sodium chloride 0.9% infusion** 1 , intravenous, continuous

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess sedation within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr and reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 2 mg/hr hydromorphone, contact MD to re-evaluate sedation therapy

Maximum recommended dose 3 mg/hr

☐ **fentanyl (SUBLIMAZE) or hydromorPHONE (DILAUDID) infusion - NOT HMSJ**☐ **fentaNYL (SUBLIMAZE) 1500 mcg/30 mL infusion** 50 , continuous

LESS than desired sedation effect: administer bolus and increase rate by 25mcg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess sedation within 4 hrs

GREATER than desired sedation effect: Decrease rate by 25 mcg/hr and reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 200 mcg/hr fentanyl, contact MD to re-evaluate sedation therapy

☐ **hydromorPHONE (DILAUDID) 15 mg/30 mL infusion** .5 , intravenous, continuous

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess sedation within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr and reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 2 mg/hr hydromorphone, contact MD to re-evaluate sedation therapy

Maximum recommended dose 3 mg/hr

☐ **propofol (DIPRIVAN) infusion**

Sign: _____ Printed Name: _____ Date/Time: _____

☐ **propofol (DIPRIVAN) infusion** 0 - 50 mcg/kg/min, intravenous, continuous

LESS than desired sedation effect: Other

Specify: INCREASE rate by 5 mcg/kg/min.

DESIRED sedation effect: Continue the same rate.

GREATER than desired sedation effect: DECREASE rate 5 mcg/kg/min while titrating sedation to meet RASS goal,

Reassess RASS every 30 minutes

If patient requiring GREATER than: 50 mcg/kg/min, Contact MD to re-evaluate sedation therapy

Propofol continuous infusion is to be used only in intubated patients on mechanical ventilation. Is the patient intubated or pending intubation?

After Initiation, reassess RASS after 30 minutes. Titrate for sedation to reach RASS goal. Once patient maintains RASS at goal, assess RASS every 4 hours.

☐ **lorazepam (ATIVAN) or midazolam (VERSED) infusion - HMM, HMSL, HMTW, HMWB, HMCL**

☐ **lorazepam (ATIVAN) 60 mg/30 mL infusion** 2 , intravenous, continuous

Indication(s): Sedation

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr lorazepam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

☐ **midazolam (VERSED) 60 mg/30 mL infusion** 2 , intravenous, continuous

Indication(s): ○ Sedation

Midazolam continuous infusion is to be used only in intubated patients on mechanical ventilation. Is the patient intubated or pending intubation?

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr midazolam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

☐ **lorazepam (ATIVAN) or midazolam (VERSED) infusion - HMW, HMCY Only**

☐ **LORAZepam (ATIVAN) 30 mg/30 mL infusion** 1 , intravenous, continuous

Indication(s): Sedation

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr lorazepam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

☐ **MIDAZolam in 0.9% NaCl (VERSED) 1 mg/mL infusion** 1 , intravenous, continuous

Indication(s):

Midazolam continuous infusion is to be used only in intubated patients on mechanical ventilation. Is the patient intubated or pending intubation?

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr midazolam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

☐ **lorazepam (ATIVAN) or midazolam (VERSED) infusion - HMSJ HMSTC Only**

☐ **LORAZepam (ATIVAN) 60 mg/30 mL infusion** 2 , intravenous, continuous

Indication(s): Sedation

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr lorazepam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

Sign: _____ Printed Name: _____ Date/Time: _____

- ☐ **MIDAZolam (VERSED) 30 mg/30 mL infusion** 1, intravenous, continuous

Indication(s): ☐ Sedation

Midazolam continuous infusion is to be used only in intubated patients on mechanical ventilation. Is the patient intubated or pending intubation?

LESS than desired sedation effect: administer bolus and increase rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

DESIRED sedation effect: Continue the same rate. Reassess RASS/BIS within 4 hrs

GREATER than desired sedation effect: Decrease rate by 0.5 mg/hr then reassess RASS/BIS within 30 mins until at goal

If patient requires GREATER than 5mg/hr midazolam, contact MD to re-evaluate sedation therapy

Maximum recommended dose 10 mg/hr

Neuromuscular Blockers (Required)

- ☐ **Synchronous ventilation or moderate-severe ARDS P/F ratio < 150 or to facilitate ventilation with intermittent dosing option**

Consider an intermittent dosing strategy over continuous infusion to facilitate protective lung ventilation.

Continuous infusion recommended for patients with persistent ventilator dyssynchrony, requirement of ongoing deep sedation, prone ventilation, or persistently high plateau pressures.

- ☐ **cisatracurium (NIMbex) injection** 0.15 mg/kg, intravenous, once, 1, Occurrences

- ☐ **vecuronium (NORCURON) injection** 0.1 mg/kg, intravenous, once, 1, Occurrences

Reconstitute vecuronium 10 mg vial with 10 mL of sterile water to make 1 mg/mL concentration. Reconstituted solution must be used within 1 hour

- ☐ **cisatracurium (NIMbex) infusion** 1 mcg/kg/min, intravenous, continuous

Intensivist-driven titration of 1 mcg/kg/min every 1 hour to a maximum dose of 10 mcg/kg/min based on ventilator dyssynchrony, plateau pressure and desaturation. Intensivist to adjust dose by modifying the order.

- ☐ **Immobility, open chest, increased intra-abdominal pressure, and elevated ICP**

- ☐ **cisatracurium (NIMbex) Continuous Infusion**

Recommended for patients with renal or hepatic failure.

- ☒ **Obtain baseline Train of Four** once

Obtain baseline Train of Four prior to neuromuscular blockade infusion

- ☒ **cisatracurium (NIMbex) infusion** 1 - 10 mcg/kg/min, intravenous, continuous

****PROGRAM INFUSION PUMP WITH WEIGHT NOTED IN ORDER MEDICATION DOSED BY IDEAL BODY WEIGHT****

Initiate infusion at 1mcg/kg/min. Titrate by 0.5 mcg/kg/min every hour to achieve 2 of 4 Train of Four (TOF). Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF GREATER than 2 of 4, INCREASE infusion rate by 0.5 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF 2 of 4, CONTINUE the same infusion rate, then repeat TOF in 4 hours. IF TOF LESS than 2 of 4, DECREASE infusion rate by 0.5 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. Max dose 10mcg/kg/min.

- ☐ **cisatracurium (NIMbex) IV Bolus and Continuous Infusion**

Recommended for patients with renal or hepatic failure.

- ☒ **Obtain baseline Train of Four** once

Obtain baseline Train of Four prior to neuromuscular blockade infusion

- ☒ **cisatracurium (NIMbex) IV bolus** 0.15 mg/kg, intravenous, once, 1, Occurrences

- ☒ **cisatracurium (NIMbex) infusion** 1 - 10 mcg/kg/min, intravenous, continuous

****PROGRAM INFUSION PUMP WITH WEIGHT NOTED IN ORDER MEDICATION DOSED BY IDEAL BODY WEIGHT****

Initiate infusion at 1mcg/kg/min. Titrate by 0.5 mcg/kg/min every hour to achieve 2 of 4 Train of Four (TOF). Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF GREATER than 2 of 4, INCREASE infusion rate by 0.5 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF 2 of 4, CONTINUE the same infusion rate, then repeat TOF in 4 hours. IF TOF LESS than 2 of 4, DECREASE infusion rate by 0.5 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. Max dose 10mcg/kg/min.

- ☐ **vecuronium (NORCURON) Continuous Infusion**

Use caution in patients with renal or hepatic dysfunction

Sign: _____ Printed Name: _____ Date/Time: _____

☒ **Obtain baseline Train of Four** once

Obtain baseline Train of Four prior to neuromuscular blockade infusion

☒ **vecuronium (NORCURON) 1 mg/mL in sodium chloride 0.9% 100 mL infusion** 0.8 - 1.5 mcg/kg/min, intravenous, continuous****PROGRAM INFUSION PUMP WITH WEIGHT NOTED IN ORDER MEDICATION DOSED BY IDEAL BODY WEIGHT****

Initiate infusion at 0.8mcg/kg/min. Titrate by 0.1 mcg/kg/min every hour to achieve 2 of 4 Train of Four (TOF). Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF GREATER than 2/4, INCREASE infusion rate by 0.1 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF 2 of 4, CONTINUE the same infusion rate, then repeat TOF in 4 hours. IF TOF LESS than 2 of 4, DECREASE infusion rate by 0.1 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. Max dose 1.5mcg/kg/min.

☐ **vecuronium (NORCURON) IV Bolus and Continuous Infusion****Use caution in patients with renal or hepatic dysfunction**☒ **Obtain baseline Train of Four** once

Obtain baseline Train of Four prior to neuromuscular blockade infusion

☒ **vecuronium (NORCURON) in SWFI injection 1 mg/mL** 0.1 mg/kg, intravenous, once, 1, Occurrences

Reconstitute vecuronium 10 mg vial with 10 mL of sterile water to make 1 mg/mL concentration. Reconstituted solution must be used within 1 hour

☒ **vecuronium (NORCURON) 1 mg/mL in sodium chloride 0.9% 100 mL infusion** 0.8 - 1.5 mcg/kg/min, intravenous, continuous****PROGRAM INFUSION PUMP WITH WEIGHT NOTED IN ORDER MEDICATION DOSED BY IDEAL BODY WEIGHT****

Initiate infusion at 0.8mcg/kg/min. Titrate by 0.1 mcg/kg/min every hour to achieve 2 of 4 Train of Four (TOF). Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF GREATER than 2/4, INCREASE infusion rate by 0.1 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. IF TOF 2 of 4, CONTINUE the same infusion rate, then repeat TOF in 4 hours. IF TOF LESS than 2 of 4, DECREASE infusion rate by 0.1 mcg/kg/min. Monitor TOF every hour to achieve and maintain 2 of 4 TOF. Once at 2 of 4 TOF, repeat TOF in four hours. Max dose 1.5mcg/kg/min.

Ophthalmic Lubricant☒ **artificial tears ointment** Both Eyes, every 4 hours

Place and close patient's eyelid while on continuous neuromuscular blocking agent.

VTE**Labs****Cardiology****Imaging****Other Studies****Respiratory****Rehab****Consults**

For Physician Consult orders use sidebar

Additional Orders

Sign: _____ Printed Name: _____ Date/Time: _____