## CV Surgical Epidural Pain Management [1672]

Nursing	
Vital Signs	
[X] Vital signs - T/P/R/BP	Routine, Every 30 min Nurse to reschedule vitals:
	-Every 30 Minutes for 4 Times (First 2 Hours)
	-Then, every 2 Hours for 1 Time (Next 2 Hours)
	-Then, every 4 Hours, PACU & Post-op
[X] Pulse oximetry	Routine, Continuous Current FIO2 or Room Air: With alarm, PACU & Post-op
Assessments	
[X] Neurological assessment	Routine, Once Assessment to Perform: Level of Sedation If respiratory rate 8 per minute or less, if patient stuporous or unarousable, PACU & Post-op
[X] Peripheral vascular assessment	Routine, As needed For ringing in the ears, metallic taste, visual disturbances, circumoral numbness/tingling, PACU & Post-op
[X] Pain Documentation	Routine, Until discontinued, Starting S Use to document infusion settings, pain scale, quality of respiration, level of sedation, side effects and site assessment:
	-Every 1 Hour for 4 Times (First 4 Hours)
	-Then, every 4 Hours for duration of therapy, PACU & Post-op
Nursing	
[X] No anticoagulants (heparin, aspirin, coumadin, dalteparin (Fragmin), or enoxaparin (Lovenox)) before consulting CV Anesthesia	Routine, Until discontinued, Starting S
[] No anticoagulants INcluding UNfractionated heparin	Routine, Until discontinued, Starting S Reason for "No" order:
[X] Maintain IV access	Routine, Continuous If primary provider discontinues IV fluids, maintain IV access with intermittent infusion device or flush with 2mL 0.9% sodium chloride every 8 hours for duration of epidural analgesia therapy
[X] Straight cath	Routine, As needed If patient unable to void for 6 hours, straight cath x 2 times and notify anesthesia
[X] Patient may shower	Routine, Daily Specify: Additional modifier: Patient may shower if allowed by primary provider
Infusion Management	
[X] Basal rate increase	Routine, As needed May increase basal rate for inadequate analgesia, may increase basal rate by 0.5milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour, PACU & Post-op

[X] Label patient's bed, chart and Kardex	Routine, Until discontinued, Starting S -with 'EPIDURAL CATHETER', PACU & Post-op
[X] May medicate as per orders while pump rate is being increased	Routine, Until discontinued, Starting S, PACU & Post-op
[X] Discontinue epidural and notify CV Anesthesia if any of the following occur	Routine, Until discontinued, Starting S -Respiratory rate 8 per minute or less, or
	-Patient is stuporous or unarousable, or
	-Sustained hypotension (SBP less than 80 mmHG, MAP less than 50 mmHg), or
	-Severe and/or recent onset confusion or disorientation, or
	-Level of sedation is 4 or more or patient is stuporous or unarousable, or
	-Ringing in the ears, metallic taste, visual disturbances, circumoral numbness or tingling, or
	-If epidural catheter becomes disconnected, PACU & Post-op
Notify Anesthesia	
[X] Notify Anesthesia	Routine, Until discontinued, Starting S, -Upon arrival to PACU or ICU
	-Prior to administration of narcotics, antiemetics, or sedatives other than those ordered by the FBOR PostOp pain service
	-Inadequate analgesia, a rise of 2 mL above baseline or patient not comfortable on 8mL/hour
	-If any other service orders discontinuation of epidural
	-For any problems or questions 24 hours/day, please contact the FBPPS at pager 713-788-7771. If no response, call FBOR at extension 713-441-3031.
	-Prior to initiation of any anticoagulant therapy (i.e., warfarin (Coumadin), heparin, dalteparin (Fragmin), enoxaparin (Lovenox), fondaparinux (Arixtra), apixaban (Eliquis), rivaroxaban (Xarelto), dabigatran (Pradaxa)), PACU & Post-o
IV Fluids	
Peripheral IV Access	
[X] Initiate and maintain IV	
[X] Insert peripheral IV	Routine, Once, PACU & Post-op
[X] sodium chloride 0.9 % flush	10 mL, intravenous, every 12 hours scheduled, PACU & Post-op
[X] sodium chloride 0.9 % flush	10 mL, intravenous, PRN, line care, PACU & Post-op
IV Boluses (Single Response)	
() sodium chloride 0.9 % bolus 500 mL	500 mL, intravenous, for 15 Minutes, once, For 1 Doses, PACU & Post-op
() sodium chloride 0.9 % bolus 1000 mL	1,000 mL, intravenous, for 30 Minutes, once, For 1 Doses, PACU & Post-op
( ) lactated ringer's bolus 500 mL	500 mL, intravenous, for 15 Minutes, once, For 1 Doses, PACU & Post-op
( ) lactated ringers bolus 1000 mL	1,000 mL, intravenous, for 30 Minutes, once, For 1 Doses, PACU & Post-op

( ) sodium chloride 0.9 % infusion	75 mL/hr, intravenous, continuous, PACU & Post-op
) lactated Ringer's infusion	75 mL/hr, intravenous, continuous, PACU & Post-op
( ) dextrose 5 % and sodium chloride 0.45 % with potassium chloride 20 mEq/L infusion	75 mL/hr, intravenous, continuous, PACU & Post-op
) sodium chloride 0.45 % infusion	75 mL/hr, intravenous, continuous, PACU & Post-op
) sodium chloride 0.45 % 1,000 mL with sodium bicarbonate 75 mEq/L infusion	75 mL/hr, intravenous, continuous, PACU & Post-op
Medications	
Epidural Solutions - HMH Only (Single Response)	
() bupivacaine (PF) 0.1% + fentaNYL 3 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
() bupivacaine (PF) 0.1% + HYDROmorphone 10 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
) bupivacaine (PF) 0.1% + HYDROmorphone 20 mcg/mL epidural solution	250 mL, epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
Epidural Solutions - HMSL Only (Single Response)	
() bupivacaine (PF) 0.1% + fentaNYL 3 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
( ) bupivacaine (PF) 0.1% + HYDROmorphone 10 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL

() bupivacaine (PF) 0.1% in normal saline epidural solution	150 mL, epidural, continuous, PACU & Post-op Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
Epidural Solutions - HMW Only (Single Response)	
( ) bupivacaine (PF) 0.1% + fentaNYL 3 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
( ) bupivacaine (PF) 0.1% + HYDROmorphone 10 mcg/mL epidural solution	epidural, continuous, PACU & Post-op May Increase Basal Rate For inadequate analgesia, may increase basal rate by 0.5 milliliters per hour every 30 minutes until patient is comfortable, up to 2 milliliters above ordered rate OR to a maximum of 8 milliliters per hour. Continuous Rate (mL/hr): 8 ml/hr PCEA Dose: 1 mL PCEA lock (Minutes): 15 Minutes One Hour Limit (mL): 12 mL
Epidural Solutions - HMTW Only (Single Response)	
(X) ropivacaine (PF) 0.2% + fentanyl 2 mcg/mL epidural solution	epidural, continuous Continuous Rate (mL/hr): 6 ml/hr PCEA Dose (mL): 2 mL PCEA lock (Minutes): 30 Minutes One Hour Limit (mL): 10 mL
() ropivacaine (NAROPIN) 0.2 % epidural solution	epidural, continuous Continuous Rate (mL/hr): 6 ml/hr PCEA Dose (mL): 2 mL PCEA lock (Minutes): 30 Minutes One Hour Limit (mL): 10 mL
Supplemental Analgesia (Pain Score 4-6)	
[] oxyCODONE-acetaminophen (PERCOCET) 5-325 mg per tablet	1 tablet, oral, every 3 hours PRN, moderate pain (score 4-6), PACU & Post-op If analgesia is inadequate, patient is easily aroused, respiratory rate is GREATER than or EQUAL to 12 per minute, and rate increase is NOT indicated. Monitor and record pain scores and respiratory status. Maximum of 3 grams of acetaminophen (total from all sources) per day in adults.
Antiemetics - HMH, HMSJ, HMW, HMSTC, HMTW Only	
[X] ondansetron (ZOFRAN) IV or Oral	"Or" Linked Panel
[X] ondansetron ODT (ZOFRAN-ODT) disintegrating tablet	4 mg, oral, every 8 hours PRN, nausea, vomiting, PACU & Post-op
	Give if patient is able to tolerate oral medication.

[X] promethazine (PHENERGAN) 12.5 mg IV	6.25 mg, intravenous, every 6 hours PRN, nausea, vomiting, PACU & Post-op Give if ondansetron (ZOFRAN) is ineffective and patient is UNable to tolerate oral or rectal medication OR if a faster
	onset of action is required.
[X] promethazine (PHENERGAN) tablet	12.5 mg, oral, every 6 hours PRN, nausea, vomiting, PACU & Post-op
	Give if ondansetron (ZOFRAN) is ineffective and patient is able to tolerate oral medication.
[X] promethazine (PHENERGAN) suppository	12.5 mg, rectal, every 6 hours PRN, nausea, vomiting, PACU & Post-op Give if ondansetron (ZOFRAN) is ineffective and patient is
	UNable to tolerate oral medication.
Antiemetics - HMSL, HMWB Only	
[X] ondansetron (ZOFRAN) IV or Oral	"Or" Linked Panel
[X] ondansetron ODT (ZOFRAN-ODT) disintegrating tablet	4 mg, oral, every 8 hours PRN, nausea, vomiting, PACU & Post-op Give if patient is able to tolerate oral medication.
[X] ondansetron (ZOFRAN) 4 mg/2 mL injection	4 mg, intravenous, every 8 hours PRN, nausea, vomiting,
, , , , , , , ,	PACU & Post-op
	Give if patient is UNable to tolerate oral medication OR if a faster onset of action is required.
[X] promethazine (PHENERGAN) IV or Oral or Rectal	"Or" Linked Panel
[X] promethazine (PHENERGAN) 12.5 mg in sodium	6.25 mg, intravenous, every 6 hours PRN, nausea, vomiting,
chloride 0.9 % 0.9 % 20 mL for Alaris pump syringe	PACU & Post-op Give if ondansetron (ZOFRAN) is ineffective and patient is
option	UNable to tolerate oral or rectal medication OR if a faster onset of action is required.
[X] promethazine (PHENERGAN) tablet	12.5 mg, oral, every 6 hours PRN, nausea, vomiting, PACU
,	& Post-op
	Give if ondansetron (ZOFRAN) is ineffective and patient is able to tolerate oral medication.
[X] promethazine (PHENERGAN) suppository	12.5 mg, rectal, every 6 hours PRN, nausea, vomiting, PACU
[A] promethazine (Friendin) suppository	& Post-op Give if ondansetron (ZOFRAN) is ineffective and patient is
	UNable to tolerate oral medication.
Antiemetics - HMSTJ Only	
[X]_ondansetron (ZOFRAN) IV or Oral	"Or" Linked Panel
[X] ondansetron ODT (ZOFRAN-ODT) disintegrating tablet	4 mg, oral, every 8 hours PRN, nausea, vomiting, PACU & Post-op
70571111	Give if patient is able to tolerate oral medication.
[X] ondansetron (ZOFRAN) 4 mg/2 mL injection	4 mg, intravenous, every 8 hours PRN, nausea, vomiting, PACU & Post-op
	Give if patient is UNable to tolerate oral medication OR if a faster onset of action is required.
[X] promethazine (PHENERGAN) IVPB or Oral or Rectal	"Or" Linked Panel
[X] promethazine (PHENERGAN) 25 mg in sodium chloride	6.25 mg, intravenous, for 30 Minutes, every 6 hours PRN,
0.9 % 50 mL IVPB	nausea, vomiting, PACU & Post-op
	Give if ondansetron (ZOFRAN) is ineffective and patient is
	UNable to tolerate oral or rectal medication OR if a faster
[X] promethazine (PHENERGAN) tablet	onset of action is required.  12.5 mg, oral, every 6 hours PRN, nausea, vomiting, PACU
	& Post-op
	Give if ondansetron (ZOFRAN) is ineffective and patient is
[X] promethazine (PHENERGAN) suppository	able to tolerate oral medication.  12.5 mg, rectal, every 6 hours PRN, nausea, vomiting, PACU
	& Post-op
	Give if ondansetron (ZOFRAN) is ineffective and patient is UNable to tolerate oral medication.

Itching: For Patients LESS than 70 years old (Single	
( ) diphenhydrAMINE (BENADRYL) injection	12.5 mg, intravenous, every 3 hours PRN, itching, PACU & Post-op
() nalbuphine (NUBAIN) injection	2 mg, intravenous, every 4 hours PRN, itching, PACU & Post-op
	Do NOT exceed MAXIMUM dose of 10 mg over 6 hours.
Itching: For Patients GREATER than 70 years old (S	ingle Response)
() cetirizine (ZyrTEC) tablet	5 mg, oral, daily PRN, itching, PACU & Post-op Use as an alternative to diphenhydramine in this age group.
Insomnia: For Patients LESS than 70 years old (Sing	gle Response)
( ) zolpidem (AMBIEN) tablet	5 mg, oral, nightly PRN, sleep, PACU & Post-op If respiratory rate is GREATER than or EQUAL to 12.
( ) ramelteon (ROZEREM) tablet	8 mg, oral, nightly PRN, sleep, PACU & Post-op
Insomnia: For Patients GREATER than 70 years old	(Single Response)
() ramelteon (ROZEREM) tablet	8 mg, oral, nightly PRN, sleep, PACU & Post-op
Respiratory Depression / Over Sedation	
[X] naloxone (NARCAN) injection	0.1 mg, intravenous, once PRN, respiratory depression, as needed for respiratory rate 8 per minute or less OR patient somnolent and difficult to arouse (POSS GREATER than 3)., For 1 Doses, PACU & Post-op Repeat Naloxone 0.1 mg once in 3 minutes if necessary (MAXIMUM 0.6 mg). If naloxone is needed, please call the ordering physician and/or CERT team. Monitor vital signs (pulse oximetry, P/R/BP) every 15 minutes for 3 times. Notif APMS or Anesthesia for any naloxone administration and monitor patient closely.
Respiratory	
Respiratory	
[X] Oxygen therapy	Routine, Continuous Device 1: Nasal Cannula Rate in liters per minute: 2 Lpm Rate in tenths of a liter per minute: O2 %: Device 2: Device 3: Titrate to keep O2 Sat Above: 95% Indications for O2 therapy: