University of Virginia Health System

Clinical Pathway: Gyn Enhanced Recovery After Surgery (ERAS) FULL Pathway

LOS: 2

Date of Origin/Revision: January 14, 2015/December 29, 2017

	Surgical Clinic	PETC	Day Prior to Surgery	Day of Surgery: SAS	Day of Surgery: Operating Room	Day of Surgery: PACU	Day of Surgery: Acute Care – 6C	POD1	POD2/ Day of Discharge
Assessments	-Identify pt as **ERAS Full** pt – create episode in EPIC -Vital signs, baseline ht/wt -Screen for OSA, VTE and diabetes -Screen for aspiration risk -Assess for chronic narcotic use, tobacco and alcohol use, ▪Screen for malnutrition, if applicable -Verify home medications	- Link PETC visit to **ERAS episode** - Stratify cardiac risk -Screen for OSA -Screen for aspiration -Screen for malnutrition -Screen for tobacco use, diabetes -Identify patient with positive antibody screen -Review home medications	-Phone screening and readiness assessment by ERAS nurses	- Link SAS visit to **ERAS episode** -Vital signs -Med weight		-Vital signs and monitoring per PACU standards -Assess for aspiration risk	-VS (with MAP) q2h x 2 and then q4h -UOP q4h -Continuous pulse oximetry with capnography	-VS q4 -Daily weight at 0600	-VS q 8h
Consults & Referrals	-WOCN nurses for marking	-Cardiology if indicated		-Notify cardiology for pacemaker patients -WOCN nurses for marking (if not done)			-Consult ERAS Pain NP for lidocaine infusion -Consult WOCN if new stoma	-Assess for inter-disciplinary consult needs: RT, SW, Nutrition, Chaplain, PT/OT	-Finalize plan for community or home health needs with Case Manager
Tests & Orders	-Use "GYN ERAS Surgery General" under the ordersets tab -EKG (F>60) -Labs: CBC, CMP, T&H (0 units) -POCT Urine Pregnancy -CEA if cancer -HgB A1c if diabetic -CT chest/ab/pelvis for staging of cancer -Post case with "ERAS Spinal"	Complete: -EKG (F>60), cardiology if indicated -Labs: CBC, CMP, T&H -POCT Urine Pregnancy -HgA1c for diabetic patients -CT chest/ab/pelvis for staging of cancer		-Type and hold (0 units) if not done -Finger stick if diabetic -Stat PT if patient on Coumadin		- Use designated orderset "ERAS PACU Focused" with specific section for Gyn Full	-Use "GYN ERAS Full Postop" for postop orders	-Labs: CBC, BMP, Mg	-No additional labs unless indicated (fallen off pathway) -Use "GYN ERAS and Non-ERAS Patients Discharge" for discharge orders

	indication in case request								
Add'l Actions						-Stand patient for weight in PACU	-Incentive spirometry Q1 hour	-DC foley at 0800 (May require formal voiding trial)	
Activities		-Encourage preoperative walking program					-Weight and walk on night of surgery within 6hrs of arrival to unit -Head of bed at 30 degrees at all times	-Pt stands for am weight -OOB to chair at least 6 hours -Ambulate in hall X2	-Pt stands for am weight -OOB to chair at least 6 hours -Ambulate in hall X3
Fluid Management		-Instruct pt on oral fluids prior to surgery – clear fluids/Gatorade up until 2hrs before scheduled surgery	-Reinforce importance of Gatorade hydration and clears until 2 hours before surgery	-Carbohydrate drink 2 hours before surgery (Gatorade 20 ounces (50 grams of carbohydrate)) -Insert PIV and saline lock	-Fluid management is Goal-directed intravenous fluid guided by Pleth Variability Index	-LR at 40 cc/hr (or 75 cc/hr if at risk for aspiration)	-LR at 40 cc/hr or 75 cc/hr if at risk for aspiration -If MAP <60 give 500 cc bolus and call chief (change order set to call for MAP less than 60) -If HR >120 call chief -UOP<120 cc over 4 hours (and the patient is otherwise ok) 500 cc bolus -Call chief/attending for bolus over 1L	-KVO IV (will still have lidocaine gtt if open case)	-Saline lock IV

Medications	-Miralax 17mg daily (starting x3-5 days prior to surgery) -Hold Coumadin for 5 days and check with PCP Re: bridge -Hold immunosuppression if possible -Diabetics - follow PETC orders -Hold vitamins, supplements, herbs 2 weeks p/t surgery -Hold NSAIDS, Plavix, Ibuprofen and Naproxen 1 week p/t surgery -If Bowel Prep: Golytely 4L, erythromycin 1g x3, neomycin 1g x3, reglan 10mg x3 Place intraop phase of care orders for VTE and ABX: -Flagyl 500 mg IV (if bowel surgery) (If PCN allergic: Cipro 400 mg and Clindamycin 900 mg) -Ancef 2g IV -Heparin - 5000U SQ immediately after spinal	-Preop instructions for diabetic and anticoagulation patients	-For those doing a bowel prep: Regular diet until 6pm; Erythromycin 1gm and Neomycin 1 gm at 13:00, 14:00, 22:00; Reglan 10 mg 12:00, 18:00, 22:00; Begin Golytely at pm, clears after 6pm -Follow orders re: Diabetic and anticoagulation medications	-Hypertension meds with sip of water -SAS nurse to release preop to intraop phase of care meds for OR – VTE and ABX	-Ancef injection 2g 0-60 minutes before incision -Start Flagyl (or cipro/clinda if PCN allergic) (500mg IV) upon entry to OR (if bowel surgery) -Antibiotics UNNECESSARY if prior hysterectomy, no hysterectomy planned, no UroGyn procedure, and no bowel procedure planned -DVT prophylaxis with 5000U heparin immediately after spinal -Induction: Propofol, ketamine 0.5 mg/kg, magnesium 30 mg/ kg bolus -Scopolomine patch at induction for prevention of PONV	-Ondansetron 4mg IV q8 PRN -Compazine 10mg PO q6 PRN	-Heparin 5000u at 1900 **MD must ensure dose is given 6-8 hrs after initial dose** -Miralax 17mg PO daily -Restart home medications (particularly antihypertensives) with exception of hypoglycemics -Ondansetron 4mg IV q8 PRN or Compazine 10mg PO q6 PRN for PONV	-Lovenox (40mg) at 0900 - caution if CRI -Miralax 17mg PO daily -Restart home medications (including anticoagulants, if indicated) with exception of hypoglycemic -Ondansetron 4mg IV q8 PRN or Compazine 10mg PO q6 PRN PONV	Meds for DC: -Miralax (1 scoop daily) PRN
Pain Management	Place SAS orders: -Celecoxib 200 mg PO (not given to patient with Coronary artery disease) -Gabapentin 600 mg PO		-Chronic pain patients should continue home pain medications until surgery	-Multimodal analgesia: 1.Celecoxib 200 mg PO (not given to patient with CAD) 2.Gabapentin 600 mg PO 3. Acetaminophen	-250mcg Intrathecal morphine prior to induction (no epidural) -No intraoperative opioids without attending approval	-Continue lidocaine infusion for open cases (no infusion for laparoscopic cases) -Lidocaine rate should run at 0.5-1mg/min	-Acetaminophen 975mg PO Q6 hours -Lidocaine infusion (0.5-1mg/min) for open cases -Celecoxib 100 mg PO BID in	-Continue lidocaine gtt (for open cases) -Continue scheduled non-narcotic meds: Acetaminophen 975mg PO Q6	Meds for DC: -Acetaminophen 975mg x60 tabs -Ibuprofen 600mg x30tabs (alternating with acetaminophen)

	-Acetaminophen 975mg PO			975mg PO	-IV analgesia: lidocaine 40 ucg/kg/min, ketamine 10 ucg/kg/min -Wound infiltrated with 30cc Bupivacaine	-Additional Pain Medication available through shortage order set for breakthrough pain	patients without coronary artery disease -Oxycodone 5mg PO Q4 PRN moderate pain; 10 mg PO Q4 PRN severe pain **No additional opioids, no PCA, no epidurals (without attending's approval)	hours -Celecoxib 100 mg PO BID in patients without coronary artery disease -Oxycodone 5mg PO Q4 PRN moderate pain; 10 mg PO Q4 PRN severe pain	-Oxycodone (5mg q4) PRN x30tabs
Nutrition		-Regular diet -Smoking and ETOH cessation -Nutrition supplementation if Alb <3.5	-For those doing a bowel prep: Regular diet until 6pm when Golytely starts and then clear liquids	-Clears until 2 hours prior to surgery -Carbohydrate drink for morning of surgery (20oz Gatorade)		-Clear liquids as tolerated	-Clear liquids as tolerated to transition to soft diet	-Clear liquids as tolerated to transition to soft diet as tolerated	-Regular diet
Education	-Provide patient with ERAS notebook -Reinforce expectations around surgery and recovery -Reinforce Bowel Regimen (Miralax 17mg (1 scoop daily) x3-5 days p/t surgery)	-Reinforce diet/NPO for ERAS patients -Smoking cessation information	-Reinforce ERAS expectations -Remind to bring ERAS notebook and (if used) CPAP machine to hospital	-Ask patient if they have their notebook and review ERAS pathway			-Postoperative activity and incentive spirometry	-Postop activity and nutrition goals and progress	-Postop activity and nutrition goals and progress
Discharge Planning	-Assess d/c needs - if complex home needs, referral to SW -Schedule patient's postop visit at this time @ 4-6 weeks postop	-Assess d/c needs including insurance needs						-Case Manager assesses for discharge needs	-Consider DC if: pain well-controlled; no abdominal distention, belching, hiccupping, or emesis; tolerating PO meds; ambulating and hydrating -Arrange for early follow up in high-risk patient with surgeon or PCP -Follow up phone call within 24-48 hrs of discharge -Ensure f/u appt at 4-6 weeks

Outcomes	Preop assessment initiated	Preop-assessment complete	Patient achieves bowel preparation, if needed Patient demonstrates readiness for surgery	Fluid and electrolyte balance maintained Pain management is effective Patient demonstrated hemodynamic stability	Fluid and electrolyte balance maintained Pain management is effective Patient demonstrated hemodynamic stability	Fluid and electrolyte balance maintained Pain management is effective Hemodynamic stability	Fluid balance maintained (< 1 kg wt gain) Pain management is effective Patient demonstrated hemodynamic stability OOB	Tolerates clear liquids and fluids discontinued Fluid balance maintained Adequate pain control OOB > 6 hours	Tolerating diet Hydrating Ambulating Bowel functioning < 15% readmission rate

ALTERNATIVE PATHWAY OR PLAN OF CARE INITIATED FOR THIS PATIENT ON: DATE _____ **INITIALS** _____