Facility: St. Charles Bend Campus, St. Charles Madras, St. Charles Prineville, St. Charles Redmond Campus	Page 1 of 13
Owner: Krista Gardinier (DIRECTOR ORTHO NEURO SERVICE LINE RN)	Effective Date: 10/28/2022

All clinical protocols need to be ordered by a physician or advanced practice practitioner (APP) before they are initiated. Once the clinical protocol has been initiated, orders specific to the clinical protocol can be entered in the electronic health record as "per protocol, no co-sign required".

For exclusions, see Ref #8315 "Clinical Protocol and Standing Orders"

SCOPE:

This protocol may be utilized under the direction of the department of anesthesiology for patient preparation in the pre-surgery clinic, procedural holding areas, radiology, medical diagnostics unit, and cardiovascular laboratory. These instructions are not exhaustive; anesthesia providers should be consulted for patient care conditions not described in this protocol.

*It may be reasonable to apply this protocol in urgent/emergent cases as time and patient conditions allow.

RATIONALE:

The Pre-Anesthesia Protocol provides a general set of nursing instructions and orders aimed at the effective and safe preparation of a patient undergoing anesthesia care during a procedure.

INSTRUCTIONS:

- 1. Nurses will initiate the Pre-Anesthesia Protocol for all patients scheduled for a procedure with anesthesiology care. The "Initiate Protocol" order will be entered, by the nurse, using the order mode "per protocol, cosign required". The Provider/APP will sign the order within 24 hours and prior to the procedure.
 - a. Laboratory and diagnostic testing will be obtained according to Appendix A for all Monitored Anesthesia Care (MAC) and general anesthesia procedural/surgical cases.
 - i. MAC for cataract surgery does not require laboratory/diagnostic testing for patient condition.
 - b. Nurses will review chart for surgeon orders and coordinate testing based on date of surgery and labs/diagnostics indicated. The phase of care may be changed at the nurse's discretion.
- 2. Nurses will refer to Appendix B for surgical/procedural risk categories.
- 3. Nurses will refer to Appendix C in identifying
 - a. Patients requiring further evaluation/treatment by their PCP or a pre-operative medicine specialist, and
 - b. Patients requiring an anesthesia consult

Pre-Anesthesia Protocol Page 2 of 13

Note: it is preferred that patients who are identified as requiring further evaluation/treatment by their PCP or pre-operative medicine, see that provider prior to the nurse consulting anesthesia.

- 4. Patients may be evaluated and optimized for surgery by their primary care physicians or preoperative medicine specialists. Pre-Surgery nurses will assess the patient to ensure the requirements of this protocol are met.
 - a. If there is a discrepancy between testing requirements in this protocol and the tests ordered by another physician, the pre-surgery clinic nurses will ensure the required tests for this protocol are completed along with other orders.
 - b. If there is a discrepancy regarding medication instructions, the nurses will defer to the anesthesia protocol and may choose to consult an anesthesia provider for clarity.
 - c. Surgeon preoperative order sets should be followed in addition to applicable orders in the anesthesia protocol.
- 5. Pre-Surgery Clinic nurses will document family or patient history of malignant hyperthermia. They will notify OR scheduling to confirm patient is first case, and notify the anesthesia tech.
- 6. Northern Campus Exclusion Criteria: Patients will not have procedures at the Northern Campus hospitals and will be redirected for care at the Bend hospital, if any of the following:
 - a. EF Less than 30%
 - b. Severe valvular disease
 - c. Left ventricular outflow tract obstruction (LVOT)
 - d. Hypertrophic Cardiomyopathy (HCM)
 - e. Severe pulmonary hypertension (PHTN) mean PAP > 55mmHg
- 7. Nurses will provide the following diet instructions:
 - a. No solid food or milk products after midnight.
 - i. This includes chewing tobacco and candy
 - ii. Do not swallow toothpaste
 - b. Clear liquids (fat free broths, water, Pedialyte, Gatorade, apple juice, pulp free juice, soft drinks, Jell-O, popsicles, tea, and black coffee):
 - i. Endoscopy patients may continue after midnight up to <u>4 hours</u> prior to procedure.
 - ii. All patients, except endoscopy, may continue after midnight <u>up to 2 hours prior</u> to the surgery or procedure.
 - c. Nothing by mouth TWO hours prior to surgery
 - d. Infants (up to 12 months of age) may have
 - i. Breast milk up until 4 hours prior to the surgery or procedure.
 - ii. Infant formula up to 6 hours prior to the surgery or procedure.
- 8. Nurses will instruct patients that their anesthesiologist would prefer that they stop smoking or cut back as much as possible prior to surgery. No smoking after midnight on the day of surgery.
- 9. Diabetic patients: in general, defer to the prescribing provider for a plan or instructions with diabetic medications. If plan significantly different from anesthesia recommendations in Appendix A, consult anesthesia. If plan not available, nurses will provide medication instructions according to the attached reference, Appendix A.

Pre-Anesthesia Protocol Page 3 of 13

a. HbA1c will only be obtained for surgical patients prior to the day of surgery. If not possible, do not order for day of surgery.

b. When an insulin calculation based on Appendix A results in partial unit dose, the nurse will round down to the nearest unit when instructing the patient.

Note: For type I diabetic patients, the nurse will notify the scheduling team so the patient can be scheduled as early in the day as possible.

- 10. Nurses will provide the following medication instructions as applicable; and will notify anesthesia provider for timelines that cannot be achieved for the listed prescription medications.
 - a. Continue all home medications unless specifically described below.
 - b. Do not take the following on the morning of surgery:
 - i. ACE inhibitors
 - ii. Angiotensin II receptor antagonists, including Entresto
 - iii. Diuretics except those containing a beta-blocker
 - 1. Instruct patient to hold potassium supplement if there is a history of stomach distress when taken without food.
 - c. Stop the following medications as indicated:
 - i. Diabetic Management:
 - 1. Hold oral diabetic agents day of procedure, except SGL2 inhibitors, which are held three days prior to procedure
 - 2. Long acting Insulin: Take 80% of evening dose day prior to procedure and 80% of morning dose day of procedure, if applicable.
 - 3. Intermediate/Mixed Insulin: Take 80% of doses day before procedure, 50% of morning doses day of procedure. Hold for BG less than 120.
 - 4. Short acting Insulin: Normal doses day before procedure. Hold day of procedure
 - 5. Insulin pump: Set at basal rate on the day of procedure
 - 6. GLP-1 Receptor Agonists (Non-Insulin injectables) and/or Insulin/GLP-1 Receptor Agonist Combination drugs: Hold day of procedure
 - a. Hold when starting bowel prep, if applicable
 - ii. 24 hours prior to procedure:
 - 1. All erectile dysfunction medications. Do not stop if taking for pulmonary hypertension.
 - iii. Five days prior to procedure:
 - 1. Coumadin (see bridge instructions)
 - 2. NSAIDs (non-steroidal anti-inflammatory drugs)
 - iv. Seven days prior to procedure:
 - 1. Vitamins, Herbal supplements, Fish Oil
 - 2. MAO inhibitors except Eldepryl
 - 3. Phentermine
 - 4. For Aspirin instructions, see Appendix E, except for procedures described below:
 - a. Vascular surgery patients should remain on Aspirin
 - b. GI Endoscopy patients taking 81-162mg Aspirin, for antiplatelet effect, should remain on their Aspirin.
 - c. Consult provider for GI Endoscopy patients taking 325mg Aspirin or greater for antiplatelet effect

Pre-Anesthesia Protocol Page 4 of 13

- v. For surgical patients:
 - Medications containing Buprenorphine, the patient should follow instructions as given by the prescribing provider. If no instructions have been given, or instructions contradict Appendix F, the RN will consult with anesthesia for a plan based on Appendix F.
 - 2. Naltrexone should be stopped 72 hours prior to surgery; 4 weeks prior for injection.
- d. For vascular surgery patients on antiplatelet/anticoagulation therapy, <u>defer to vascular surgeon</u>. Verify TCAR patients are taking dual antiplatelet therapy 5 days prior to surgery.
- e. For non-surgical cases, defer to proceduralist for anticoagulation plans.
- f. For non-invasive radiology procedures (i.e. MRI), continue anticoagulants/antiplatelets.
- g. Instructions regarding anticoagulants/antiplatelets need to originate from the prescribing provider or surgeon. The Pre-Surgery Clinic RN will confirm the anticoagulant hold plan with the patient, and consult anesthesia if the plan differs from the following guidelines:
 - i. For all non-vascular, non-cardiothoracic, and non-cardiovascular surgery patients:
 - 1. For patients on Warfarin, a bridge plan should be documented by the prescribing physician. For questions regarding the appropriate bridge plan, the prescribing physician should be directed to the Perioperative Anticoagulation Guideline.
 - 2. For patients taking other anticoagulants, the RN will consult anesthesia if instructions differ from these guidelines, unless instructed by surgeon to continue.
 - a. Direct Oral Anticoagulants (DOACs), such as Xarelto, Pradaxa, Eliquis Hold 48-72 hours, no bridging.
 - i. For cases anticipating neuraxial or regional anesthesia (i.e. total joints, abdominal surgery, thoracic surgery, OB), all DOACs, except Pradaxa, should be held 72 hours prior to surgery. Pradaxa should be held 5 days prior to surgery for cases anticipating neuraxial or regional anesthesia.
 - Brilinta and Plavix Hold 5-7 days. Effient Hold 7 days, no outpatient bridging. Consult anesthesia provider if the patient has recently had one of the following:
 - a. Cardiac stents placed within past 6-12 months
 - b. Vascular Stent less than 3 months old
- 11. When possible, nurses will obtain copies of cardiac and pulmonary studies completed within the past five years. This excludes EKGs, unless indicated per Appendix A; then obtain most recent prior EKG.
- 12. Whenever possible, nurses will obtain interrogation reports for all procedures/surgeries:
 - a. Pacemakers within the past twelve months.
 - b. Internal defibrillators within the past six months.

Pre-Anesthesia Protocol Page 5 of 13

c. If there is no interrogation report available, nurses will discuss the patient history with the anesthesia provider assigned to the pre-surgery clinic to determine a plan of care. Nurses will facilitate an appointment with cardiology (if necessary) and notify the surgeon of the plan.

- 13. Day of procedure nursing instructions for anesthesia care:
 - a. IV to be started upon admission to the pre-procedural holding area
 - i. An intradermal injection of bacteriostatic normal saline 0.9% (up to 0.5ml) may be used as a local anesthetic before starting an IV.
 - 1. Lidocaine 1% (up to 0.5 mL), intradermal injection may be used as a local anesthetic for adult patients who have a history of difficult IV access, present conditions associated with difficult access, patient request or a large catheter (#16For larger) is being inserted.
 - ii. Topical lidocaine-prilocaine 2.5% cream may be used as a topical anesthetic before starting an IV.
 - b. Intravenous fluids, unless otherwise ordered:
 - Non-dialysis adult patients, infuse 1000 mL of lactated ringers at 20mL per hour.
 - ii. Dialysis patients or any patient with a potassium level greater than or equal to 5, infuse 1000 mL of normal saline at 20mL per hour rate.
 - iii. Patients 1-10 years old, set-up IV with micro-drip tubing and lactated ringers 500 mL and infuse at 20mL per hour. Pediatric flow rate not to exceed 1mL/kilogram/hour.
 - iv. Patients less than 1 year of age, set-up IV with burette and lactated ringers 500 mL. Administration of infusion under the discretion of anesthesia.
 - c. Complete all laboratory testing as indicated by the attached reference or physician orders.
 - d. Initiate all additional surgeon orders for pre-operative phase of care.

REFERENCES:

- American Society of Anesthesiology Guidelines
- Anderson, T.A., Quaye, A.N., Ward, E.N., Wilens, T.E., Hilliard, P.E., Brummett, C.M. (2017). To stop or not, that is the question: Acute pain management for the patient on chronic Buprenorphine. *Anesthesiology*, 126(6), p. 1180-1186.
- Apfelbaum JL, et al. <u>Practice Advisory for Preanesthesia Evaluation: An Updated Report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation</u>. Anesthesiology. 2012 March. 116(3):522-538.
- Bell CM, HatchWV, Fischer HD, Cernat G, Paterson JM, Gruneir A, Gill SS, Bronskill SE, Anderson GM, Rochon PA. <u>Association between tamsulosin and serious ophthalmic</u> <u>adverse events in older men following cataract surgery.</u> JAMA. 2009 May 20;301(19):1991-6.
- Cohn, SL. <u>Preoperative Medication Management</u>. Johns Hopkins hospitalist CME module.
- Chung F, Yuan H, Yin L, Vairavanathan S, Wong DT. <u>Elimination of preoperative testing</u> in <u>ambulatory surgery</u>. *AnesthAnalg*February 2009 108:467-475.
- Fleisher LA, Beckman JA, Brown KA, et al. <u>ACC/AHA 2007 guidelines on perioperative cardiovascular evaluation and care for non cardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines . J Am CollCardiol. 2007;50:e159-241.
 </u>
- Fleisher LA, Beckman JA, Brown KA, et al. ACCF/AHA 2009 Focused Update on Perioperative Beta Blockade Incorporated into ACC/AHA 2007 guidelines on perioperative cardiovascular evaluation and care for noncardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelinesthe guidelines on perioperative cardiovascular evaluation and care for noncardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on Practice GuidelinesJ Am CollCardiol. 2007;50:e159-241.
- Goldenberg NA, Jacobson L, Manco-Johnson MJ. <u>Brief communication: duration of platelet dysfunction after a 7-day course of Ibuprofen</u>. Ann Intern Med. 2005 Apr 5;142(7):506-9.
- Hepner DL. <u>The role of testing in the preoperative evaluation</u>. Cleve Clin J Med. 2009 Nov;76(suppl4):S22-7.
- JooHS, Wong J, Naik VN, Savoldelli GL. <u>The value of screening preoperative chest x-rays:</u> a systematic review. Can J Anesth. 2005;52:568–74.
- KatzRI, et al. <u>Survey study of anesthesiologist' and surgeons' ordering of unnecessary preoperative laboratory tests</u>. AnesthAnalg January 2011; 112:207-212.
- Pasternak LR. Preoperative testing: moving from individual testing to risk management. Anesth Analg February 2009 108:393-394.
- Quaye, A. N., & Zhang, Y. (2019). Perioperative Management of Buprenorphine: Solving the Conundrum. Pain medicine (Malden, Mass.), 20(7), 1395–1408. Retrieved from: https://doi.org/10.1093/pm/pny217
- St. Charles Health System <u>Beta HCG (Serum Pregnancy) Test; Guidelines for Waiver and Release.</u>
- UpToDate, Inc

Pre-Anesthesia Protocol APPENDIX A:

PRE-ANESTHESIA TESTING PROTOCOL SUMMARY of TESTING CBC should be ordered w/o differential, unless noted Timeframes within which testing must occur **Medical Condition** 6 months 3 days 30 days 3 months 1 year 14 days *BMP Adrenal Insufficiency Anemia or Chronic Blood loss (active treatment, Hgb < 12) CBC Angina: (Symptoms within 6 months) EKG H&H Bleeding Disorder *CBC *EKG Cardiovascular/Cerebrovascular Disease/Peripheral Vascular History *BMP BMP. H&H Congestive Heart Failure with Dyspnea **EKG** EKG, BMP Covid-19 history within 90 days (18 years and older) *CBC w/ diff Chronic Kidney Disease with Creatinine greater than 1.3 *BMP, *CBC BMP, CBC UA/CS Dysuria (active symptoms of urinary tract infection - painful urination) (K+) H&H *EKG Dialysis (Post dialysis K+) Hematological d/o: Active treatment (ET, Leukemia, Lymphoma, MDS, *CBC Hematological d/o: History of (ET, Leukemia, Lymphoma, MDS, PV) *CBC CBC, CMP Hemochromatosis *CBC HIV (HIV with antiretroviral treatment) CMP if Tx Idiopathic Thrombocytopenic Purpura CBC PT/INR, Liver Disease (Active Hepatitis B or C, Cirrhosis, Liver Failure) CMP, CBC Radiation Treatment within past 3 months Symptomatic Arrhythmia or Ventricular Tachycardia *CBC BMP, EKG *BMP. Thyroid Disorder *TSH **Diabetes Management** 3 days 14 days 30 days 3 months 6 months 1 year **CBG Pre-Diabetes, Bariatric Surgery Patients HbA1c **CBG All Diabetic Patients HbA1c, *BMP **CBG HbA1c, BMP *EKG Insulin Controlled Diabetic Patients Medication Therapy 3 days 14 days 30 days 3 months 6 months 1 year ACE inhibitor (Repeat BMP if dose increase/IV contrast since last lab) **BMP** Anticonvulsants: Draw drug level if increase to normal seizure activity or CBC, CMP dose change since last drug level CBC CMP Chemotherapy within past 3 months (or after last chemotherapy tx) **PT/INR Coumadin (excluding non-invasive imaging) K+ Digoxin: (Draw Digoxin level if HR<50 or >100) (Drug level) BMP Diuretic K+ K+ Digoxin/diuretic&presurg bowelprep (OR cases only, not endoscopy) Immunosuppressive medication, excluding steroids (repeat test if no CMP, *CBC CMP since initiation of therapy) **BMP** Lithium CBG Prednisone or other Corticosteroids Recreational Drug Use w/in 6 months (excluding marijuana or Urine Drug prescription opioids) Drug Theophylline Level (recheck if no level since last dose change) level Special Attention Surgery Cases 3 days 14 days 30 days 3 months 6 months 1 year All incisional OR cases (excluding pediatric patients) Scheduled Surgery: Colorectal ERAS Pathway Patients **CBG CBC, CMP Scheduled surgery or procedure using IV Contrast agent (Does not Creatinine include green contrast for cholecystectomy) Females: from menses to menopause except hysterectomy / BSO: **BHCG if Collect a Qualitative BHCG Urine test or waiver on day of surgery. BHCG wi 3 not prev Collect a Qualitative BHCG Serum test if specified in the days done surgeon/proceduralist order Scheduled Surgery: Cardiac, Thoracic, Major Vascular, Intracranial T&S CBC, BMP T&S Scheduled Surgery: Arthroplasty (hip / knee / shoulder) bilateral or CBC revision Scheduled Surgery: Prostatectomy, Nephrectomy, Robotic or open abdominal cases involving the liver, pancreas or spleen, Multi-T&S CBC, BMP level thoracic / lumbar spinal fusion, ALIF, GYN tumor debulking * Moderate or High-Risk Surgery ** Must be collected day of surgery

Moderate and High Risk Surgical/Procedural Categories Moderate = M High = H

Cardiothoracic		GYN		Urology	
All Open Procedures	Н	Hysterectomy (Abdominal)	Н	ESWL	M
Lobectomy/Wedge Resection	Н	Hysterectomy (Laparoscopic, vaginal, or robotic)	M	Cystectomy	Н
Mediastinoscopy	Н	Myomectomy	Н	Nephrectomy	Н
Open Thoracotomy	Н	Open GYN surgery	Н	Total Prostatectomy	Н
Pneumonectomy	Н	Tumor Debulking	Н	TURP/TURBT	M
Thoracoscopy/VATS	Н				
Cardiovascular		NEURO		Vascular	
All Open Procedures	Н	Artificial Disc / Arthroplasty	M	AKA/BKA	Н
Mitral Clip	Н	Craniotomy	Н	AAA (open or endovascular)	Н
TAVR	Н	Filum Lysis	M	Aortic Bypass Graft (AFBG)	Н
ENT/Maxillofacial		Fusion –ACDF with Sternal Split or Anterior ALIF (any level)	Н	Endarterectomy: Carotid/Femoral	Н
Extensive Maxillofacial (ex: plastic reconstruction or fracture repair)	Н	Fusion – 1 to 2 Level (except above)	M	Peripheral Extremity Bypass Graft	Н
Head & Neck Cancer	Н	Fusion - >2 Levels	Н	Involving Major Central Arteries/Veins with intervention	Н
GEN		Intracranial (i.e. VP shunt or biopsy)	M	TCAR	Н
Bariatric Surgery	Н	Posterior Spine* 1-2 Level	M	TEVAR	Н
Colectomy	Н	Posterior Spine* > 2 Levels	Н		
Colostomy, Ileostomy	М	*Discectomy, Decompression, Foraminotomy, Laminectomy			
Complex Breast Flap	Н	,			
Gastrectomy	Н	ORTHO		Interventional Radiology	
Hepatic Resection, all	Н	AKA/BKA	Н	Interventional Neuro (embolization, coil, etc.)	Н
Hernia: Umbilical/Ventral	М	Arthroplasty – Shoulder/Hip/Knee (total, partial, revision)	Н	TIPPS	
Intra-abdominal/Pelvic (bowel, stomach, spleen, pancreas)	Н	Arthroscopy – Shoulder, knee, hip	M		
Lap Appy	M	Fracture – Distal bone (radius, ulna, tibia, fibula)	M		
Lap Chole	M	Fracture – Hip or Pelvis	Н		
Mastectomy	M	Fracture – Long bone (humerus, femur)	Н		
Open Intra-abdominal	Н				
Paraesophageal Hernia	Н	Plastics		Emergency Surgery	
Perforated Viscus (Bowel Perf)	Н	Breast Reduction, Reconstruction	M	Major Trauma	Н
Splenectomy	Н	Major Plastic Reconstruction of Chest & Abdomen (including flaps)	Н	Severe Sepsis	Н
Thyroid/Parathyroid	M				
5 7 5					
Whipple/Pancreatectomy	Н				

Procedures not listed above are considered low-risk. (Some examples include: bronch, port, hysteroscopy, optho, urology (cysto,circ), dental, endoscopy)

APPENDIX C:

Based on surgical/procedural risk – Any of the following conditions require a preoperative visit with the patient's PCP or a pre-operative medicine specialist if they are:

- New or newly symptomatic or
- Not current with routine surveillance and
- Not addressed at a preoperative visit within the past 6 months

	Moderate to High-Risk	Low Risk
Unable to walk up a flight of stairs without chest pain or new onset dyspnea; or unable to walk two blocs without chest pain or new onset shortness of breath (SOB)	Х	X
Arrythmia	Х	
A1c ≥ 8.5	Х	
Anemia	Hgb ≤ 12	Hgb ≤ 10
Bleeding/Coagulation Disorder	X	
BMI > 50	X	
Coronary Artery Disease (MI, Coronary bypass graft/stents)	X	X
Carotid Artery Disease	Х	
Chest Pain	Х	X (unstable)
Congestive Heart Failure (CHF)	X	X (untreated)
Chronic Obstructive Pulmonary Disease (COPD)/Emphysema	X	
History of symptomatic COVID-19 infection within 90 days of surgery	Х	
Post symptomatic COVID-19 infection with ongoing sequalae	Х	X
Home Oxygen	Х	
Hospitalizations/ED Visits without follow-up and unrelated to procedure	Х	X
Peripheral Vascular Disease	Х	
Pneumonia/Upper Respiratory Infection within 4 weeks	Х	X
Shortness of Breath/Dyspnea	X	
Uncontrolled hypertension (> 180 SBP or > 110 DBP)	X	X
Valve Disorders (moderate to severe, artificial valve > 10 years old, or symptomatic valvular pathology)	X	

APPENDIX D:

Anesthesia provider will be consulted for any of the following conditions, <u>regardless of preoperative workup</u>:

Elective non-cardiac surgery within 60 days of a myocardial infarction (MI)

COPD exacerbation within 30 days

Acute PE/DVT within 3 months

Stroke within 6 months

Unstable or untreated complex medical problems

Pheochromocytoma

Unexplained familial death following anesthesia

History of difficult airway

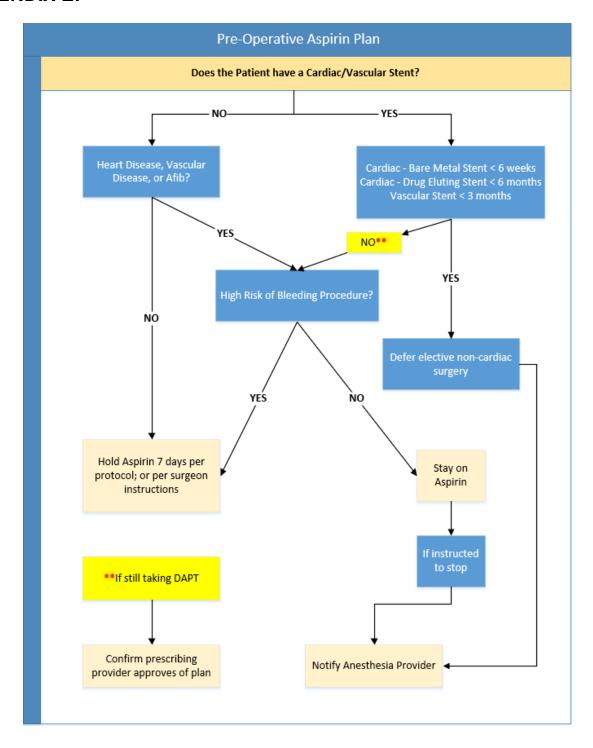
Hematologic disorders requiring preoperative planning (i.e. DDAVP/Factors, Sickle Cell Disease)

Heart valve stenosis and/or insufficiency, except cardiothoracic surgery or cardiology procedures, as described below:

- Moderate to severe valve stenosis or insufficiency
- Symptomatic valvular pathology

Except for cardiothoracic surgery or cardiology procedures, anesthesia provider will be consulted for patients with:

- Left ventricular outflow tract obstruction (LVOT)
- Hypertrophic Cardiomyopathy (HCM)
- Severe pulmonary hypertension (PHTN) mean PAP > 55
- Ejection Fraction (EF) less than 40%
- Recent stent placement
 - o Bare Metal Stent < 6 weeks
 - o Drug Eluting Stent < 6 months
 - Vascular Stent < 3 months
- Congenital heart disease (except resolved ASD or PFO)



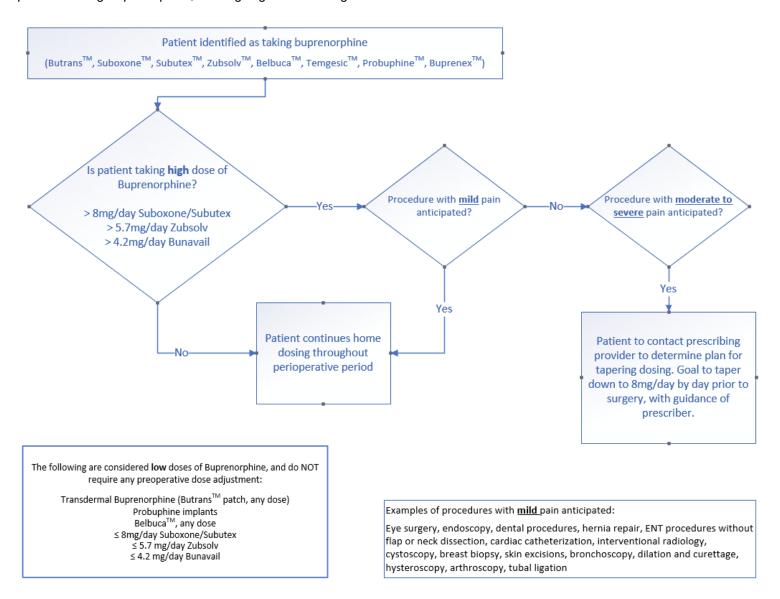
Surgeries with a high-risk of bleeding:

- Intracranial Surgery
- Major plastic reconstructive procedures
- Occulo-plastic surgery
- Percutaneous Nephrostomy
- Retro-bulbar block during cataract/retinal
- Prostatectomy, including transurethral resection of the prostate (TURP)

- Intramedullary (within the spine) surgery (i.e. fusions)
- · Multi-level spinal surgery
- · Strabismus repair

APPENDIX F:

Suggestions for patients taking Buprenorphine, undergoing elective surgeries



Suggested wait times from the date of COVID-19 diagnosis to surgery or procedure, are below. For patients scheduled before the wait time has passed, the nurse will notify the proceduralist that it is recommended that the patient wait per the guidelines. If the proceduralist states that the patient needs to proceed, anesthesia will be consulted.



Department of Anesthesia and Perioperative Surgical Services Timing of Surgery following SARS-CoV-2 infection



Suggested wait times from the date of COVID-19 diagnosis to surgery are as follows:

Type of Case	Underlying conditions and severity of COVID infection	Recommended Time to wait prior to surgery	
Elective Case	COVID positive who was asymptomatic or has recovery of mild NON-respiratory symptoms	minimum 4 weeks*	
	COVID positive for symptomatic patient (cough, dyspnea) who did not require hospitalization and who does not have post acute sequelae	minimum 6 weeks*	
	COVID positive with resolution of symptoms if diabetic, immunocompromised or hospitalized	8-10 weeks	
	COVID positive patient who was in the intensive care unit due to COVID infection	12 weeks	
	COVID positive patient who continues to have post acute sequelae of the SARS-CoV-2 infection	delay elective surgery until symptoms resolve. Consider optimization with PCP/Preoperative medicine	
Urgent (not emergent)	COVID positive with or without symptoms	10-day wait for asymptomatic/mildly symptomatic pts 20 day wait for those immunocompromised or severe disease recommend all pts are> 24 hours since last fever without antipyretics and COVID symptoms (cough, SOB) have improved	

^{*}according to the Nepogodiev, consider up to 7 weeks in these cases

Vaccination status does not change these recommendations. These guidelines are not definitive and should not replace clinical judgement by the PCP, surgical team and anesthesiologist. A shared decision making should occur with the above parties and patient if surgery needs to occur before the stated guidelines.

Definitions:

Mild Illness: Signs and symptoms of COVID-19 (e.g., fever, sore throat, malaise, headache, muscle pain) without shortness of breath, dyspnea, or abnormal chest imaging. Moderate Illness: Evidence of lower respiratory disease by clinical assessment or imaging and oxygen saturation (SpO2) ≥94 percent on room air at sea level.

Severe Illness: Respiratory rate >30 breaths per minute, SpO2 <94 percent on room air at sea level (or, for patients with chronic hypoxemia, a decrease from baseline of >3 percent), a ratio of arterial partial pressure of oxygen to fractional inspired oxygen (PaO2/FiO2) <300 mmHg, or lung infiltrates involving >50 percent of the lung fields.

Critical Illness: The presence of respiratory failure, septic shock, and/or multiple organ dysfunction.

Severely immunocompromised: includes patients who are currently undergoing chemotherapy for cancer, are within 1 year of receiving a hematopoietic stem cell or solid organ transplant, have untreated HIV with a CD4 T lymphocyte count <200, have a combined primary immunodeficiency disorder, are treated with prednisone >20mg/day for >14 days Post acute sequelae: includes fever or chills, cough, SOB, congestion or runny nose, sore throat, new loss of taste or smell, N/V, diarrhea, headache, fatigue, myalgia. A recent study showed a 30 day postoperative mortality rate of 6% in patients who undergo surgery <7 weeks after testing positive for SARS-CoV-2 if experiencing persistent symptoms (vs baseline of 1.5%). The risk for postoperative pulmonary complications in this scenario is 2.8%. Therefore, it is recommended to delay elective surgery.

* Consider optimization appointment with PCP or Preoperative Medicine for all patients who have had a COVID positive test.

Is repeat SARS-CoV-2 testing needed? Patients with a history of a Covid positive test prior to January 1st, 2022 will be required to have a Covid test within two days prior to procedure. If testing positive, their procedure may need to be postponed again. Patients with a history of a positive test after January 1st, 2022 should not be re-tested within 90 days of their planned surgery.

References

ASA and APSF Statement on Perioperative Testing for the COVID-19 Virus. The updated ASA and APSF Statement on Perioperative COVID Testing.

December 8, 2020, update August 08, 2021 (Available at https://www.asahq.org/about-asa/newsroom/news-releases/2021/08/asa-and-apsf-statement-on-perioperative-testing-for-the-covid-19-virus]

Bui et al. (2021). Preparing previously COVID-19-positive patients for elective surgery: a framework for preoperative evaluation. Perioperative Medicine 10:1 https://doi.org/10.1186/s13741-020-00172-2

Ending Isolation and Precautions for People with COVID-19. Interim Guidance. Updated Sept. 14, 2021 [Available from https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html]

Nepogodiev D, Simoes JFF, Li E, et al: Timing of surgery following 3ARS-CoV-2 infection: an international prospective cohort study. Anaesthesia (in press as of Mar 3, 2021)

up

updated February 1, 2022