

[Click Here](#)



1/1/24 Fu Buono Douglas Rahman Lee Cooper Hamid Avallone Avallone Fu Work Work VOFF Work OFF Work 3-4 1/8/24 Rahman Dority Buono Fu Douglas Cooper Hamid Serratos Avallone Rahman Work VOFF VOFF Work Work OFF 3-4 1/15/24 Fu Buono Douglas Rahman Serratos Cooper Lee Hamid Avallone Fu OFF Work VOFF Work OFF Work 3-4 1/29/24 Fu Buono Douglas Serratos Avallone Sowinski Dority Hamid Rahman Rahman VOFF Work Work Work VOFF 3-4 2/5/24 Serratos Rahman Buono Fu NONE Cooper Dority Avallone Serratos Work OFF Work OFF Work OFF 3-4 2/19/24 Rahman Buono Buono Lee Dority Avallone Serratos Rahman Work OFF Work OFF Work Work 2/26/24 Serratos Hamid Buono Rahman Walker Dority Lee Serratos Serratos OFF Work OFF Work OFF Work 3/4/24 Rahman Buono Cooper Serratos NONE Dority Lee Rahman Rahman OFF Work OFF Work Work 3/18/24 Lee Serratos Buono Dority Douglas Avallone Rahman Cooper Lee Lee VOFF Work Work Off Work 3/25/24 Fu Serratos Buono Lee NONE Rahman Avallone Avallone Fu Work Work OFF Work Work Off 4/1/25 Serratos Avallone Cooper Fu Rahman Buono Dority Douglas Avallone Serratos Work Work Work OFF VOFF Off 4/8/24 Fu Buono Cooper Serratos Rahman Hamid Douglas Lee Avallone Fu Work Work VOFF VOFF Off 4/15/24 Dority Buono Douglas Fu Walker Rahman Hamid Dority Serratos OFF Work Off Work Work Off 4/22/24 Rahman Buono Buono Dority Fu Lee Avallone Avallone Rahman Work Off Work Off 4/29/24 Serratos Buono M(T) Buono Avallone Douglas Brewer Fu Rossos 7a-5p Dority Dority PC VOFF Off Off Off Serratos Off 9-23, 24 9/30/24 Serratos Rahman Rahman Work Work Off Work Work Off 5/13/24 Lee Serratos Douglas Rahman Avallone Fu Hamid Lee Lee VOFF Work Off Work Off Off 5/20/24 Serratos Rahman Buono Lee Douglas Dority Fu Avallone Serratos Off VOFF Off Off Work Work 5/27/24 Fu Dority Buono Serratos Serratos Lee Hamid Douglas Avallone Fu Off Work Off Work Off 6/3/24 Dority Buono Douglas Fu Lee Serratos Rahman Avallone Serratos Dority Work Work Off Off Work Work 6/10/24 Serratos Buono Douglas Dority Sowinski Lee Hamid Rahman Fu Serratos Off Work Off Work Work VOFF 6/17/24 Dority Rahman Buono Serratos Fu Lee Douglas Avallone Dority Dority Work Work Off Off Work Work 6/24/24 Brewer Rahman Buono Dority Fu Serratos Hamid Douglas Avallone Brewer Off Work Off Work Work 7/1/24 Rahman Buono Douglas Brewer Fu Serratos Dority Hamid Rahman Off Work Off Work Work 7/8/24 Serratos Hamid Buono Rahman Dority Avallone Douglas Brewer Serratos Fu VOFF Work Off Work Work 7/15/24 Fu Avallone Buono Serratos Douglas Rahman Brewer Hamid Avallone Fu Work VOFF Work VOFF Work 7/22/24 Brewer Serratos Douglas Fu Buono Sowinski Avallone Dority Avallone Brewer Work Off Off Off VOFF 7/29/24 Dority Serratos Douglas Brewer Buono Fu Sowinski Sample 7-29,30,31 Shirley 8-1,2 Avallone Dority Off Work Off Off Work Work 8/5/24 Avallone Buono Douglas Dority Serratos Fu Brewer Fu Avallone Work Work Available MTW 8/12/24 Fu Serratos Buono Avallone Douglas Hamid Avallone Fu PC Work Off Work Off Avail M 8/19/24 Dority Avallone Douglas (Buono 8-24, 25 Fu Brewer Serratos Dority Dority Work Work Off Work VOFF Avail TW 8/26/24 Brewer Serratos Buono Dority Douglas Fu Hamid Avallone Brewer Work VOFF Off Work Work Avail MTW 9/2/24 Serratos Buono Buono Brewer Sowinski Douglas Avallone Fu Avallone** Work Work Off Off Off V 9/9/24 Brewer Buono Douglas Serratos Sowinski Dority Hamid Fu Avallone Brewer Off Work Off Work V 9/16/24 Avallone Serratos Buono Brewer Dority Fu Douglas Fu Avallone Work Work Off Off Work Avail TW Serratos Off (9-17, 19, 20) 9/23/24 Dority Serratos (Buono M(T) Buono Avallone Douglas Brewer Fu Rossos 7a-5p Dority Dority PC VOFF Off Off Off Serratos Off 9-23, 24 9/30/24 Serratos Avallone Douglas Dority Buono Fu Brewer Fu Brewer Work Work Off Off Work Off 10/7/24 Brewer Buono Douglas Serratos Hamid Dority Fu Rossos 7a-5p Brewer Serratos Off Work Off VOFF Off Avail MTWHF 10/14/24 Dority Serratos Buono Brewer Hamid Douglas Sowinski Fu Avallone Dority Off VOFF Off VOFF Work Work 5days 10/21/24 Serratos Buono Douglas Dority Hamid Brewer Sowinski Fu Rossos 7a-5p Serratos 5p-7a Fu 7a-9p Serratos 9p-7a Off Work Off VOFF Work Work 5days 10/28/24 Brewer Buono Douglas Serratos Avallone Dority Sowinski Fu Rossos 7a-5p Brewer Brewer VOFF Work Off Off Work Work 5days 11/4/24 Serratos Dority (6,7,8th) DOUGLAS!! 4-5th Buono Brewer Fu Hamid UMALI Avallone Serratos Off Work Off Work Off Avail MTWHF Dority Off 4th-5th (board days) 11/11/24 Fu Avallone Buono Serratos Brewer Dority Hamid Avallone Serratos Work Off Off Work VOFF Avail M 11/18/24 Avallone Serratos Douglas Fu Brewer Dority Buono Serratos Avallone Work Work Off Off Work Avail M 11/25/24 Dority **serratos 11-26 1500-070011-27 Buono Buono Avallone Hamid Fu Douglas Dority Dority Off-PC Work VOFF VOFF Work Avail MT 12/2/24 Fu Serratos Buono Dority Avallone Brewer Hamid Brewer Fu VOFF Off Off Work Work Avail MTWHF 12/9/24 Dority Serratos Douglas Fu Brewer Buono Buono Vu? Rossos 7a-5p Dority Dority Off Work Off Off avail to Work Extra Shift MTWHF Work -- 12/16/24 Fu Serratos Douglas Dority avail to work extra shift MWH Buono Brewer OPEN Sowinski?? Rossos 7a-5p, Serratos 5p-7a Fu Off Work Off Off avail to Work Extra Shift MTWHF Work Avail MTW 12/23/24 Brewer Hamid Buono Fu Dority Serratos OPEN OPEN Avallone Brewer Off Off VOFF Work Work -- 12/30/24 Serratos Buono Douglas Brewer Fu Sowinski Hamid Serratos Serratos Off Work VOFF Work Work Avail M H F ERAS Protocol for elective colon surgery Brief overview Anesthesia provider is responsible for three important aspects of elective colorectal surgery such as decreasing surgical stress response, fluid management and analgesia. Please read following to familiarize yourself with overview and recommendations on what to do with each phase of anesthesia. (A) Pre-Admission Information and counseling Detailed Information given to patient before the procedure about surgical and anesthesia procedures may diminish fear and anxiety and enhance postoperative recovery and quicker hospital discharge. (B) Preoperative fasting and carbohydrate treatment Clear liquid should be allowed 2 hours and solid food 6 hours before the surgery. Preoperative carbohydrate treatment should be used routinely. In diabetic patients carbohydrate treatment can be given along with diabetic medication. It has been shown in studies that it reduces preoperative thirst, hunger and anxiety as well as postoperative insulin resistance. It also results in less postoperative loss of nitrogen and proteins as well as better maintained lean body mass and muscle strength. (C) Preanesthetic medications Patient should not receive long or short acting sedatives or anxiolytics because it delays immediate postoperative recovery. If necessary short acting narcotics such as fentanyl can be administered carefully to facilitate placement of regional anesthesia. Consider celecoxib 200 mg po, oxycodone CR 10-20 mg po and neuntin 600 mg-1200 mg po based on patient evaluation and comorbidities (D) Prophylaxis against thromboembolism Patient should wear well fitting pneumatic compression stockings and should receive pharmacological prophylaxis with LMWH. Extended prophylaxis for 28 days should be given to patients with colorectal cancer. (E) Antimicrobial prophylaxis with skin prep Routine prophylaxis with intravenous antibiotics within 30-60 minutes of surgical incision. Redosing should be given during prolonged surgery according to half life of drug and renal status. Skin prep is recommended with chlorhexidine alcohol group. Hairs clippers should be used instead of razor. (F) Standard anesthesia protocols No general anesthesia technique has shown to be superior. It makes sense to use short acting induction agents such as propofol combined with short acting narcotics such as fentanyl or remifentanyl infusion. Ultra short acting muscle relaxant can be titrated using neuromuscular monitoring. Maintaining deep muscle relaxation helps facilitate surgical access. If PONV is concern then TIVA is always an option. Deep anesthesia in elderly population shown to be harmful and leads to postoperative confusion therefore BIS monitoring is recommended in elderly population. (G) Nasogastric tube insertion There is no rationale for routine insertion of a nasogastric tube during elective colorectal surgery except to evacuate air which might have entered the stomach during ventilation by a facial mask and it should be removed before extubation. (H) PONV A multimodal approach should be adopted if more than 2 risk factors are present. Decadron has been shown to be effective but it might take a little longer to work so time it with induction (I) Intraoperative temperature control Maintaining normothermia is important to maintain normal body homeostasis. Temp < 36 has been shown to increase wound infection rate and earlier studies reported morbid cardiac events therefore it is recommended to prewarm patient in preoperative area, use warm solutions and blankets during perioperative period. (J) Intraoperative fluids Fluid therapy plays a vital part in achieving optimal out comes after surgery but continues to be one of the most controversial aspects of perioperative care. Intravascular volume is one of the key determinants of cardiac output and therefore oxygen delivery to the tissues. Intravascular hypovolemia at a particular time can lead to hyperperfusion of vital organs and the bowel, which can lead to complications. However, administering too much fluid can lead to bowel oedema and increased interstitial lung water, which can also lead to complications. If the patient is normovolaemic, blood pressure should be maintained using vasopressors to avoid fluid overload. It is apparent that fluid requirements in patients under going surgery by a laparotomy is different to laparoscopic surgery due to increased fluid shifts, bowel handling and an increased SIRS. The patient is also more likely to have thoracic epidural analgesia (TEA), which also changes vascular tone and venous capacitance, and further complicates fluid therapy. Laparoscopic surgery, therefore, would appear to offer the potential to simplify the way fluid is administered and reduce fluid requirements, but there is evidence that cardiac output is reduced by the physiological consequences of the head-down position and pneumoperitoneum. Therefore, it is important to target fluid and oxygen delivery appropriately in this group of patients. Fluid shifts should be minimized if possible. That is, avoiding bowel preparation, maintaining hydration by giving oral preload up to 2 h before surgery, as well as minimizing abdominal handling and exteriorization of the bowel outside the abdominal cavity and avoiding blood loss. Balanced crystalloids should be preferred to 0.9 % saline. In open surgery, patients should receive intraoperative fluids (colloids and crystalloids) guided by flow measurements to optimise cardiac output. Flow measurement should also be considered if patient is at high risk with comorbidities; if blood loss is17 ml/kg; or in prolonged procedures. Vasopressors should be considered for intra- and postoperative management of epidural-induced hypotension provided the patient is normovolaemic. The enteral route for fluid postoperatively should be used as early as possible, and intravenous fluids should be discontinued as soon as is practicable. (K) Control of hyperglycemia Increased glucose levels have been shown to be affecting wound healing and increase morbidity and mortality therefore it is recommended to check for FBG in patients with diabetes and preferably HbA1c. Insulin may have to be used in patients with high levels. It is hoped that above will give you an understanding of ERAS and will improve our outcomes and patient comfort and possibly early discharge. Recommendations (1) Check NPO status and inquire about carbohydrate intake and any liquids taken > 2 hours ago (2) Adequate IV access (3) Check preop temperature and make sure prewarming blanket if any are on (4) Mid or low level epidural catheter placement (5) PONV prophylaxis if indicated (6) Check blood sugar if diabetic (7) Use 80% FIO2 during the case (8) 8 mg Dexamethasone with induction (9) 50 mg Ketamine with induction (10) 5000 unit heparin sq by room nurse after induction and before incision (11) Pre incision antibiotics and check renal status before re dosing (12) 30 mg toradol consider renal status first (13) Lidocaine infusion at 2 mg/min will continue in recovery room (14) Goal directed fluid therapy, preferably use vasopressors if required (15) Minimize narcotics (16) Maintain normothermia ie >36 C Verifying that you are not a robot... Hamid/Lee Avallone 7a-7p Govindaswamy 7p-7a Work Arnett ERAS Protocol Preop 1 Check NPO status and inquire about carbohydrate intake and any liquids taken > 2 hours ago 2 Adequate IV access 3 Check preop temperature and make sure prewarming blanket is on 4 Low (T8-11) thoracic level epidural catheter placement 5 Oral Preop medications (Celebrex, gabapentin, etc) 6 Check blood sugar regardless of DM Intraop 1 PONV prophylaxis with 2 or more agents a. 8 mg Dexamethasone with induction b. 4mg Ondansetron prior to extubation 2 IF NO EPIDURAL: 20-50mg Ketamine with induction 3 IF NO EPIDURAL: Lidocaine infusion at 2 mg/min and continue in recovery room 4 5000 unit heparin SQ after induction and before incision 5 Pre-incision antibiotics and check renal status before re-dosing 6 Use a BIS monitor in elderly patients and titrate volatile as indicated 7 IF NO EPIDURAL: give 30 mg toradol (consider renal status). Do not use toradol if epidural is in. It increases the risk of epidural hematoma 8 Desflurane is the preferred volatile anesthetic 9 80% or lower FIO2 during the case 10 Strict fluid therapy as above, preferably use vasopressors if required 11 Minimize opioids 12 Maintain normothermia ie >36 C 13 2-3ml 0.125% Bupivacaine Q5-10min towards the end of the case, monitoring for hypotension PostOp 1 Confirm adequate analgesia via Epidural in PACU 2 Confirm stable patient vital signs and normothermia ----- Anesthesia provider is responsible for three important aspects of elective colorectal surgery: decreasing surgical stress response, optimizing fluid management and managing perioperative analgesia. (A) Pre-admission Information and counseling Detailed Information should be given to patient before the procedure about surgical and anesthesia procedures which should diminish fear and anxiety and enhance postoperative recovery and speed hospital discharge. (B) Preoperative fasting and carbohydrate treatment Clear liquid should be encouraged up to 2 hours prior to anesthesia induction. Preoperative carbohydrate treatment should be used routinely. In diabetic patients carbohydrate treatment can be given along with diabetic medication. It has been shown in studies to reduce preoperative thirst, hunger and anxiety as well as postoperative insulin resistance. By creating an anabolic rather than catabolic state it also results in less postoperative loss of nitrogen and proteins as well as better maintained lean body mass and muscle strength. (C) Preanesthetic medications Avoid long or short acting sedatives or anxiolytics because it delays postoperative recovery. If necessary, short acting narcotics such as fentanyl can be administered carefully to facilitate placement of regional anesthesia. In preoperative holding eligible patients should generally receive PO: Celebrex 200mg Gabapentin 300-600mg Acetaminophen 1000mg If sufficient risk factors: Scopolamine patch (D) Pain management planning Discuss with surgeon: Thoracic epidural vs TAP catheter For patients receiving Thoracic Epidurals: Towards the end of the case consider dosing 2-3ml of 0.125% Bupivacaine every 5-10min until an adequate level of analgesia is achieved Confirm in PACU an adequate level of analgesia and redose epidural or notify supervising Anesthesiologist if it is not rapidly achieved Hold Ketamine (E) Thoracic infusions Minimize sedatives & PACU narcotics For patients receiving TAP blocks: Intraop Lidocaine infusion at 2mg/min (note lidocaine infusion works synergistically with volatiles and lesser doses of volatile may be needed) 20-50mg Ketamine IV bolus between induction and incision Minimize opioids, sedatives & PACU narcotics (F) Thoracic epidural placement Time out Gentle sedation, minimizing opioids/anxiolytics Position patient Level the bed and level patient's buttocks perpendicular to the bedside line Keep the patient upright Give patient firm elbow support on table Ask patient to bow back toward performer & keep head midline down to chest Palpate scapular tips and draw a line crossing the midline This is T7-8 or T8-9 in 70% of patients in sitting position (it will be T6 in prone) Find spinous process tips at midline. Symmetric shoulder retraction helps identifying midline esp. for obese patients. Locate T9 or 10 spinous process and move 1cm paramedian Prep skin & make a skin wheel w/ lidocaine syringe Consider using the 25g as an explorer to draw an imaginary local 3D map (spinal bodies/processes, ligament & their depth/margin/angle to reach them, see images below) and decide what angle to advance Touhy. Advance Touhy needle as determined above (generally, 10-20 degree upward and slightly toward midline depending on soft tissue thickness determined above) until it engages ligament. Longer Touhy is seldom needed Remove the stylet Use loss of resistance technique with small (1-3mm at a time which is the thickness of thoracic epidural space) advances. Each alternating color of the needle corresponds each centimeter (3 or more advances for each) If advance is blocked by bone, see the depth of needle & withdraw fully out of the ligament Bending needle seldom helps redirection in thick ligament Remember the needle angle & depth for the next trial. DO NOT push the needle hard against bone. The needle can slide & pierce to the spinal cord! The feeling of opening snap doesn't happen as frequently as lumbar epidural. If the loss of resistance is not complete, either advance 1 mm more or back completely out and try again Keep the depth when turning. Confirm no CSF or blood out of needle If CSF returns, completely remove the needle from the skin & stop the procedure If blood returns before loss of resistance, the needle can be advanced based upon your judgement If blood returns after loss of resistance, withdraw the needle out of ligament & redirect Thread in catheter approximately 4cm Easy threading is another positive sign of proper placement Read Touhy needle depth and threading depth Remove needle over catheter Confirm the depth of catheter Example: needle depth=5cm & 4cm catheter threading Give 3ml of test dose (1.5% lidocaine with epinephrine) to rule out intravascular injection No blood on aspiration is not a reliable method of determining intravascular catheters (E) DVT Prophylaxis Patient should wear well-fitting SCD and receive pharmacological prophylaxis with LMWH post operatively. Extended prophylaxis for 28 days should be given to patients with colorectal cancer. 5000 Units SQ Heparin should be administered before incision (F) Antimicrobial prophylaxis with skin prep Routine prophylaxis with intravenous antibiotics within 30-60 minutes before surgical incision. Redosing should be given during prolonged surgery according to half life of drug and renal status. Skin prep is recommended with chlorhexidine alcohol group. Hairs clippers should be used instead of razor. (G) Standard anesthesia protocols No general anesthesia technique has shown to be superior. It makes sense to use short acting induction agents such as propofol combined with short acting narcotics such as fentanyl where necessary. Short acting muscle relaxant should be titrated using neuromuscular monitoring. If PONV is concern, TIVA is always an option but may require more aggressive neuromuscular blockade. Deep anesthesia in elderly population shown to be harmful and leads to postoperative confusion. Therefore, BIS monitoring is recommended in elderly population. (H) Nasogastric tube insertion There is no rationale for routine insertion of a nasogastric tube during elective colorectal surgery except to evacuate air which might have entered the stomach during ventilation by a facial mask and it should be removed before extubation. (I) PONV A multimodal approach should be adopted if more than 2 risk factors are present. Decadron has been shown to be effective but it might take a little longer to work so time it with induction (J) Intraoperative temperature control Normothermia is important to maintain homeostasis Temp < 36: Increase wound infection and morbid cardiac events Preop: Prewarm patient (Bair Hugger) Intraop: Warm solutions and blankets (K) Intraoperative fluids Fluid therapy plays a vital part in surgical outcomes No single parameter (CVP, base excess, LVEDP, LVEDV or variability) can definitively assess volume status Intravascular volume determines cardiac output (CO) & O2 delivery Hypovolemia: hypoperfusion of vital organs and the bowel Hypervolemia: bowel edema, pulmonary edema Normovolemia: Vasopressors to control BP to avoid fluid overload Considerations Laparotomy surgery (particularly emergencies): increased fluid shift, bowel handling and SIRS may require more fluid compared to laparoscopy Laparoscopic surgery: Head-down position & pneumoperitoneum reduces CO Thoracic epidural changes vascular tone & capacitance: Restrictive fluid strategy is shown to improve outcome compared to liberal strategy Intraoperative fluid management LR or plasmalyte is preferred to NS Flow measurements to optimize CO, compensate blood loss and to stratify prolonged surgery Evolemic epidural-induced hypotension: Control with Vasopressors Postop enteral fluid should be used as early as possible w/ discontinuing IVF Fluid management for our department Start IVF in preop: Overnight fasting compensation, anticipating fluid shift by epidural and general anesthesia Calculate fluid deficit & replace: (Wt in Kg + 40) x (fasting time in hrs) for adults Maintenance fluid + Replace intraop fluid & blood loss Cut down calculated fluid need if surgery > 3hrs to restrict fluid (L) Control of hyperglycemia Increased blood glucose (BG): This is an independent risk factor (regardless of DM diagnosis) for poor wound healing, morbidity and mortality Check BG regardless of DM status (optionally HbA1c) Insulin infusion may have to be used 1 Fu 2 Hamid C Douglas PC Lee V Choi V Weber 2 1 Wright 2 Avallone L Lee C Agarwal PC Fu V Cooper asc Douglas asc Weber 3 1 Wright 2 Avallone L Lee C Agarwal PC Fu V Cooper asc Douglas asc Weber 4 1 Wright 2 Avallone L Lee C Agarwal PC Fu V Cooper asc Douglas asc Weber 5 1 Wright 2 Avallone L Lee C Agarwal PC Fu V Cooper asc Douglas asc Weber 6 1 Wright 2 Avallone L Lee C Agarwal PC Fu V Cooper asc Douglas asc Weber 7 1 Agarwal 2 Avallone C Buono PC Fu V Cooper 8 1 Wright 2 Avallone C Agarwal PC Fu V Cooper 9 1 Hamid 2 Choi L Weber C Douglas PC Wright V Buono V Cooper asc Avallone asc Lee 10 1 Hamid 2 Choi L Weber C Douglas PC Wright V Buono V Cooper asc Avallone asc Lee 11 1 Hamid 2 Choi L Weber C Douglas PC Wright V Buono V Cooper asc Avallone asc Lee 12 1 Hamid 2 Choi L Weber C Douglas PC Wright V Buono V Cooper asc Avallone asc Lee 13 1 Hamid 2 Choi L Weber C Douglas PC Wright V Buono V Cooper asc Avallone asc Lee 14 1 Agarwal 2 Choi C Douglas PC Wright V Buono V Cooper 15 1 Hamid 2 Choi C Douglas PC Wright V Buono V Cooper 16 1 Weber 2 Fu L Choi C Buono PC Hamid V Lee V Wright asc Cooper asc Aggarwal 17 1 Weber 2 Fu L Choi C Buono PC Hamid V Lee V Wright asc Cooper asc Aggarwal 18 1 Weber 2 Fu L Choi C Buono PC Hamid V Lee V Wright asc Cooper asc Aggarwal 19 1 Weber 2 Fu L Choi C Buono PC Hamid V Lee V Wright asc Cooper asc Aggarwal 20 1 Weber 2 Fu L Choi C Buono PC Hamid V Lee V Wright asc Cooper asc Aggarwal 21 1 Cooper 2 Fu C Buono PC Hamid V Lee V Wright 22 1 Weber 2 Fu C Buono PC Hamid V Lee V Wright 23 1 Choi 2 Lee L Fu C Cooper PC Weber V Avallone V Douglas asc Buono asc Wright 24 1 Choi 2 Lee L Fu C Cooper PC Weber V Avallone V Douglas asc Buono asc Wright 26 1 Choi 2 Lee L Fu C Cooper PC Weber V Avallone V Douglas asc Buono asc Wright 27 1 Choi 2 Lee L Fu C Cooper PC Weber V Avallone V Douglas asc Buono asc Wright 28 1 Belamkar 2 Lee C Cooper PC Weber V Avallone V Douglas 29 1 Choi 2 Lee C Cooper PC Weber V Avallone V Douglas 30 1 Aggarwal 2 Hamid L Wright C Buono PC Choi asc Avallone asc Fu 27 1 Cooper 2 Avallone L Lee C Buono PC Fu V Weber asc Douglas asc Choi 28 1 Cooper 2 Avallone L Lee C Buono PC Fu V Weber asc Douglas asc Choi 29 1 Cooper 2 Avallone V Weber asc Douglas asc Choi 30 1 Cooper 2 Avallone V Weber asc Douglas asc Choi 31 1 Cooper 2 Avallone V Weber asc Douglas asc Choi Precedex for Anesthesia providers: Precedex binds to pre-synaptic alpha 2 receptors, inhibiting norepinephrine and catecholamine release. (Increased doses can bind to postsynaptic receptors 1. 94% protein bound (caution in hepatic patients, dose reduction should be considered) 2.Reduces inhalational anesthetic requirement (MAC) 3. Onset 10-15 minutes (Give Early depending on when you want to see effects) 4. Peak effect in 15-20 minutes 5. Intranasal onset 45-60 minutes, with peak effect 90-105 minutes 6. Distribution half-life= 5 minutes 7. Plasma half-life (T1/2)= 2-3 hours (infusions will be longer) 8. Elimination half-life= 2 hours (infusions will be longer) 9. Studies have shown it decreases inflammatory markers 10. It is not an analgesic, but has opioid sparing effects. Pediatric Precedex (Dexmedetomidine) Dosing Pre Op: Intransal Dosing 2mcg/kg is equivalent to 0.5mg/kg of Versed Must be given 45 minutes before going back to OR, and total dose usually divided between 2 syringes for atomizers Intra Op: 0.3 - 1.0 mcg/kg (Dosed at 4 - 8 mcg at a time) - Typical dose for smooth emergence is 4 - 20 mcg pushed over 5 min - Decide total dose wanting to be given (typically 0.5mcg/kg), give ¼ to ½ the dose over a minute at a time. Pay attention to HR, if bradycardia presents stop or bolus slower once brady resolves (kids have increased vagal tone) Post Op: Dosing is same as smooth emergence Types of cases: Pediatric dental, T&A's, other ENT procedures, and to prevent/treat postop delirium. If short case, give at the beginning. If new to this drug (provider) it's a good idea to under dose for short case (0.2-0.3mcg/kg) to prevent giving too much causing sluggishness increasing PACU times. If given at lower dose, but still thrashing on wakeup, give a little propofol, followed by more precedex. Provider technique will improve once you gain a little more confidence with using this drug. Just remember, it doesn't have an instant effect. Adult Precedex Dosing Dosing is very similar to pediatric population. Acute Bradycardia and Hypotension are common side effects. 0.3 - 1.0 mcg/kg is common for both the intraoperative phase and postoperative emergence - Infusion and sedation doses 0.2 - 1.0 mcg/kg/hr Types of cases: Short procedural cases (0.5-1mcg/kg slow push preoperatively at least 10-15 min before stimulation, then 10-20 mg push propofol for local injection), MAC for totals (with spinals) bolus dose precedex (give early) then propofol gtt can be 25-50mcg/kg/min vs higher rates and higher resp. depression risks. T&V sedation and endovascular MAC cases (use caution in severe cardiac issues (low EF) 1 lower level dose and give slower), neurosurgery, and OB cases. Also useful to treat withdrawal from benzos, opioids, alcohol, and recreational drugs. And it can be used as an antishivering agent. References Kaur, M, & Singh, P.M. (2011). Current role of dexmedetomidine in clinical anesthesia and intensive care. Anesthesia, essays and researches, 5(2),128. Retrieved from ♦ Liu, Y.,Liang, F., Liu, X.,Shao, X, Jiang, N.,&Gan, X. (2018). Dexmedetomidine reduces perioperative opioid consumption and postoperative pain intensity in neurosurgery: a meta-analysis. Journal of neurosurgical anesthesiology, 30(2), 146-155. McEvoy, M.D.,Scott, M.J., Gordon, D.B., Grant, S.A., Thacker, J.M., Wu, C.L., &Miller, T.E. (2017). American Society for Enhanced Recovery (ASER) and Perioperative Quality Initiative (POQI) joint consensus statement on optimal analgesia within enhanced recovery pathway for colorectal surgery:part 1 -from the preoperative period to PACU. Perioperative Medicine, 61. doi:10.1186/s13741-017-0064-5.