

Inclusion criteria:

- Patients > 10 years of age
- Shoulder, elbow, knee, and ankle sports medicine cases (open and arthroscopic)

Exclusion criteria:

- Diagnostic scope alone
- Manipulation under anesthesia only
- Trauma cases

Nerve Block Considerations

- Please involve an APS Physician for ordering block solution
- **Adjuncts:** Consider clonidine or dexmedetomidine and preservative free dexamethasone to prolong block

Preoperative Care

- Carbohydrate-rich clears up to 2 hours before surgery start time
- **SDS Medications (administered after pt seen by surgeon/resident in pre-op):**
 - Midazolam if needed for anxiolysis
 - Acetaminophen PO 15 mg/kg (max 1000 mg)
 - Oxycodone PO
 - 0.1 mg/kg up to 50 kg, 5mg for 50-75 kg, 7.5 mg for 75-100 kg, 10 mg for >100 kg
 - To be ordered by surgeon or anesthesiologist
 - Consider scopolamine patch if high risk for PONV

Abbreviations (laboratory and radiology studies excluded):

SDS - Same Day Surgery
 APS - Acute Pain Service
 iPACK- Infiltration between the Popliteal Artery and Capsule of the Knee
 PONV - Post-operative nausea and vomiting
 TIVA - Total intravenous anesthesia
 PACU - Post-Anesthesia Care Unit
 ACL - Anterior cruciate ligament

Intraoperative Care

Intraoperative Medication Bundle

- **Antibiotics:**
 - Discuss at huddle & administer prior to incision
 - Cefazolin 30 mg/kg
 - Max of 2 g or 3 g if >120 kg
 - Clindamycin 10 mg/kg
 - Max 900 mg
 - Only if patient has failed pre-op testing for allergy or has documented severe reaction to cefazolin
- **Antiemetics:**
 - Dexamethasone 0.1 mg/kg (max 8 mg)
 - Ondansetron 0.15 mg/kg (max 4 mg)
- **Multimodal Analgesia:**
 - Acetaminophen IV 12.5 mg/kg (max 1000 mg) *if not given in SDS*
 - Ketorolac IV 0.5 mg/kg (max 15 mg) at closure
 - IV opioids as needed

Regional Anesthesia

Please Involve an APS Physician

- **Discuss nerve blocks with surgeon at huddle**
 - **If Shoulder/Elbow surgery:**
 - Brachial plexus block
 - **If Knee surgery:**
 - Adductor canal/femoral block
 - For ACL & multi-ligamentous knee reconstruction cases
 - Adductor canal/femoral block+ iPACK block
 - No block for diagnostic arthroscopy, plica excision, lateral meniscus repair only
 - **If Ankle surgery:**
 - Popliteal nerve block + saphenous nerve block

Maintenance of Anesthesia

- **Volatile** or TIVA maintenance at discretion of anesthesiologist
- **Normothermia:**
 - Utilize Bair Hugger
 - Goal intraoperative temperature is 36° - 38° C

Additional Considerations

- Vancomycin solution needed for ACL autograft cases
 - Exclusion: allergy, IT Band ACL reconstructions
- Tranexemic Acid
 - Discuss at huddle with surgeon
 - 10 mg/kg bolus with 5mg/kg/hr infusion
 - Osteotomy cases (femoral derotation osteotomy, distal femoral osteotomy, tibial tubercle osteotomy, high tibial osteotomy, distal tibial osteotomy)
 - Exclusions: allergy, history of DVT or PE

Postoperative Care: PACU to discharge

Postoperative Management

- **PACU Orders:**
 - **Pain Management:**
 - Fentanyl 0.5 mcg/kg prn pain
 - Hydromorphone 5 - 10 mcg/kg or morphine 0.05 - 0.1 mg/kg prn breakthrough pain
 - Clonidine IV 1mcg/kg prn agitation and/or breakthrough pain
 - **PONV:**
 - Ondansetron and diphenhydramine prn
 - Can consider scopolamine patch and/or amisulpride IV 10 mg

[Postoperative medication instructions algorithm](#)

This care process model is meant as a guide for the healthcare provider, does not establish a standard of care, and is not a substitute for medical judgment which should be applied based upon the individual circumstances and clinical condition of the patient.