Abbreviations (laboratory and radiology studies excluded):

SDS - Same Day Surgery APS - Acute Pain Service

PENG - Pericapsular nerve group block

NG - Nasogastric

PO - By mouth

POD - Post-operative day

PONV - Post-operative nausea and vomiting

P.T. - Physical Therapy

TIVA - Total intravenous anesthesia

PACU - Post-Anesthesia Care Unit

Intraoperative Medication Bundle

• Antibiotics:

- Discuss at huddle
- Administer before incision

Antiemetics:

- Dexamethasone 0.1 mg/kg (max 8 mg)
- Ondansetron 0.15 mg/kg (max 4 mg)

• Multimodal Analgesia:

- IV acetaminophen 12.5 mg/kg (max 1000 mg) at start of case
- Ketorolac 0.5 mg/kg (max 15 mg) at closure
- Consider dexmedetomidine bolus/infusion
- · Consider ketamine infusion

• Limit IV opioids:

- Fentanyl prn
- Minimize long-acting opioids

Preoperative Care

- Active warming of patient in SDS
- Anxiolysis: midazolam per anesthesia team

Intraoperative Care

Nerve Block Considerations

- Consider lower concentrations of local with high volume if fascial plane block
- Be mindful of toxic local anesthetic dosages when multiple blocks are performed
- If unable to perform peripheral nerve blocks consider epidural placement
- Adjuncts: Consider clonidine or dexmedetomidine and preservative free dexamethasone to prolong block

Regional Anesthesia

Please Consult APS Physician

- Discuss nerve blocks with surgeon at huddle
 - If Proximal femoral osteotomy only:
 - Femoral nerve block plus lateral femoral cutaneous nerve block OR
 - Suprainguinal fascia iliaca block +/- PENG block OR
 - PENG block + lateral femoral cutaneous nerve block

If Acetabuloplasty:

- Suprainguinal fascia iliaca block +/- PENG block OR
- Quadratus lumborum block

If Tibial involvement:

- Popliteal nerve block with saphenous nerve block OR
- Popliteal nerve block with adductor canal block

• If Distal femur involvement:

- Femoral nerve block **OR**
- Adductor canal block

Maintenance of Anesthesia

- Volatile or TIVA maintenance at discretion of anesthesiologist
- Normothermia:
 - Patients with cerebral palsy are at high risk for hypothermia
 - Room temperature set to 70° F
 - Utilize Bair Hugger
 - Goal intraoperative temperature 36° -38° C

• Euvolemia:

- Goal is clinical **euvolemia** (zero fluid balance, no net weight gain on POD #1)
- Isotonic fluids at 3-7 ml/kg/hr (additional as clinically indicated)

Prior to Transfer to PACU

Discontinue urinary catheter

Postoperative Care: Inpatient to discharge Main Inpatient Goals of Care

Bowel regimen & Diet

- Daily bowel regimen
- Avoidance of NG tube
- Advance diet on POD 0
- Antiemetics: ondansetron and diphenhydramine prn

Postoperative Pain Management

Surgeon and anesthesiologist to discuss need for APS consult based on effectiveness of peripheral nerve blocks

Dexmedetomidine infusion (only if APS consulted) 0.1 - 0.3 mcg/kg/min

• May adjust depending on baseline neurological function

PO diazepam 0.1 mg/kg q6 hrs scheduled (unless otherwise discussed with surgeon) **IV acetaminophen** 12.5 mg/kg (max 1000 mg) q6 hrs scheduled

Change to PO on POD 1

IV ketorolac 0.5 mg/kg (max 15 mg) q6 hrs alternating q3 hrs with acetaminophen **Oxycodone** 0.1 mg/kg q 4hrs prn once tolerating clears

IV hydromorphone (only if APS consulted) 5-10 mcg/kg or morphine 0.05-0.1 mg/kg q4 hrs prn severe breakthrough pain or if not tolerating PO intake

Discharge home with post-operative follow up visit in two weeks

Physical Therapy
• P.T. consulted on POD 1

Prior to surgery algorithm

Contact: EvidenceBasedPractice @cmh.edu

Link to: synopsis and references

Last Updated: 12.13.2024