

PeriOp Pain Management Can Opioid-free Surgery Be a Reality Soon?

Klane Hales, M.D.
Anesthesia Medical Director
Hoag Orthopedic Institute



Why Opioid Free Anesthesia?

- Avoid Side Effects of Opioids
- Enhanced Recovery (ERAS)
- Shorter Hospital Stays
- Improved Outcomes
- Better Patient Satisfaction
- Reduced risk of addiction



Opioid Adverse Effects

- Nausea/Emesis
- Urinary Retention
- Constipation
- Orthostatic Hypotension
- Pulmonary Respiratory Depression, Atelectasis
- Sedation
- Addiction Risk



Integrated Approach

Hoag Orthopedic Institute

- Pre-operative Hydration Protocol
- PONV
- Temperature Control PACU goal > 36 C
- Pain Management
 - Multi-modal Therapy
 - Regional Anesthesia
- Setting Expectations

Multimodal Therapy

- Ketamine (Propofol)
- NSAIDS
- Acetaminophen
- Magnesium
- Methocarbamol
- Neuroleptics: Gabapentin, Pregabalin
- TXA
- Dexmetetomidine
- Dexamethasone



Peripheral Nerve Blocks

- •Single Shot Adductor, Genicular, IPACK
- Continuous Catheters
- Exparel Experience
- Adjuncts Dexmetetomidine



Anesthesia Techniques

- •TIVA limit inhalation Propofol
- Intrathecal Anesthesia: Bupivacaine, Choroprocaine, Mepivacaine
- Peripheral Nerve Blocks: Adductor Canal, Genicular, IPACK -Ropivacaine/Bupivacaine
- Adjuncts to Peripheral Nerve Blocks Dexmetetomidine, Dexamethsone, Epinephrine
- Periarticular Block intraoperative Ropivacaine, Epinephrine, Ketoralac
- BIS Monitor integrated EEG



PONV Prevention

- Ondansetron
- Scopolamine Patch
- Metoclopramide
- Aprepitant (APONVIE)
- Amisulpride (Barhemsys)
- Active Warming
- Early Hydration Protocol



Setting Exceptions

Hoag Orthopedic Institute

New Modalities

Cryoneurolysis

- lovera
- Genicular Nerve: Deep or Superficial
- Perform two weeks before surgery
- Good for Anterior and Medial Part of knee
- Posterior Pain is possibility



- Suzetrigine (Journavx)
- Bupivacaine/Meloxicam (Zenrelef)
- Radio-frequency Stimulation



Summary

- OFA is uniquely suited for Total Knee Arthoplasty
- Integrated approach.
- Answer to the question: Yes, opioid free anesthesia is possible and here to stay.
- Protocols Vary.
- New Modalities on the horizon.

