

**2022 SAMBA ANNUAL MEETING**  
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**Pro/Con: We should never use narcotics in outpatient procedures**

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**Disclosure:** Baxter International Inc.

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*"The modern tendency in anaesthesia is towards specialization, complexity, and polypharmacy. The more drugs are used, the more difficult does it become to attribute changes in the patient to their true cause."*

Noel Alexander Gillespie (1904-1950)  
British Journal of Anaesthesia 22:192,1950

Reminiscences of Anaesthesia by Degrada



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**Opioid-Free Anesthesia**

Just because we can,  
does it mean we should?

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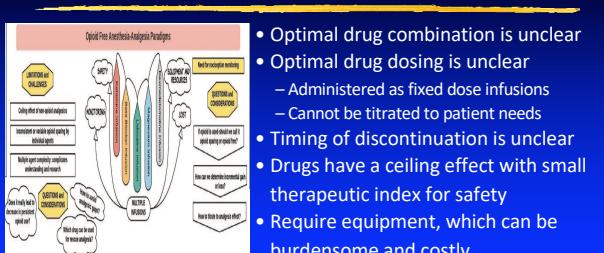
**Opioid-Free Anesthesia Does NOT Reduce Postoperative Opioids**

**Impact of Enhanced Recovery After Surgery and Opioid-Free Anesthesia on Opioid Prescriptions at Discharge From the Hospital: A Historical-Prospective Study**  
Bandal D, et al: Anesth Analg 2017; 125: 1784-92

- Reduced intraoperative opioid use did not influence postoperative opioid prescribing
- Need to focus on discharge prescribing practices

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**Opioid-Free Anesthesia: Controversies**



- Optimal drug combination is unclear
- Optimal drug dosing is unclear
  - Administered as fixed dose infusions
  - Cannot be titrated to patient needs
- Timing of discontinuation is unclear
- Drugs have a ceiling effect with small therapeutic index for safety
- Require equipment, which can be burdensome and costly

Shanthanna H, et al: Anesthesiology 2021; 134: 645-59

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**Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Acute Pain Management From the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists**  
Schwenk ES, et al: Reg Anesth Pain Med 2017

- No role of single bolus dose
- Recommended for opioid-tolerant patients undergoing painful surgical procedures when regional analgesia is not possible
- Adverse effects: hallucinations, nightmares
- Avidan MS, et al: Lancet 2017; 390: 267-75; Vlissides PE et al: Br J Anaesth 2018; 121: 249-59
- Contraindications: Poorly controlled CV disease, hepatic dysfunction, high intracranial and intraocular pressures, active psychosis, pregnancy

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## Dexmedetomidine: Not as Safe as You Think

- Promoted as having no respiratory effects
- Similar upper airway collapsibility as propofol, regardless of level of sedation
- Can cause upper airway obstruction
- Prolonged risk hypotension requires hemodynamics monitoring after treatment cessation (i.e., PACU and beyond)



### Upper Airway Collapsibility during Dexmedetomidine and Propofol Sedation in Healthy Volunteers

A Randomized Controlled Crossover Study

Lodinás A, et al. Anesthesiology 2019; 131: 962-73

### Discharge Readiness after Propofol with or without Dexmedetomidine for Colonoscopy

A Randomized Controlled Trial

Edökpolo U, et al; Anesthesiology 2019; 131: 279-86

Perioperative adverse events attributed to  $\alpha_2$ -adrenoceptor agonists in patients not at risk of cardiovascular events: systematic review and meta-analysis

Demiri M, et al; Br J Anaesth 2019; 123:795-807

## Intravenous lidocaine: it's all about a risk-benefit analysis

**Intravenous lidocaine: benefits require better evidence, and potential risks apply to all team members**

Anaesthesia 2021; 76: 717-722

## The use of intravenous lidocaine for postoperative pain and recovery: international consensus statement on efficacy and safety

Fool, et al; Anaesthesia 2021; 76: 238-50

Do not use at the same time as, or within the period of action of, other LA interventions, particularly nerve blocks

## Unlicensed intravenous lidocaine for postoperative pain: always a safer 'licence to stop' than to start

Pandit JJ, McGuire N; Anaesthesia 2021; 76: 156-60

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**Interaction between magnesium sulfate and neuromuscular blockers during the perioperative period: A systematic review and meta-analysis\***

Laura Rodríguez-Rubio PhD, MD<sup>a,b,\*</sup>, Julián Solís García del Pozo PhD, MD<sup>a,c</sup>, Eduardo Nava PhD, MD<sup>a,d</sup>, Joaquín Jordán PhD<sup>a,d</sup> J Clin Anesth 2016; 34: 1524-34

Influence of the perioperative administration of magnesium sulfate on the total dose of anesthetics during general anesthesia. A systematic review and meta-analysis\*

Laura Rodríguez-Rubio, PhD MD<sup>a,b,\*</sup>, Eduardo Nava, PhD MD<sup>d</sup>, Julián Solís García del Pozo, PhD MD<sup>a,c</sup>, Joaquín Jordán, PhD<sup>a,d</sup> J Clin Anesth 2017; 39: 129-38

**Magnesium sulphate enhances residual neuromuscular block induced by vecuronium**

British Journal of Anaesthesia 1996; 76: 565-566

T. FUCHS-BUDER AND E. TASSONYI

**Intravenous magnesium re-establishes neuromuscular block after spontaneous recovery from an intubating dose of rocuronium: a randomised controlled trial**

Grégoire A, Hans, Besongo Bosenge, Vincent L, Bonhomme, Jean F, Brichant, Ingrid M, Venneman and Pol C, Hans

Eur J Anaesthesiol 2012; 29: 95-99

## General anesthetic techniques for enhanced recovery after surgery: Current controversies

Girish P. Joshi, MBBS, MD, FFARCSI, Professor of Anesthesiology and Pain Management\*

Best Practice & Research Clinical Anaesthesiology 35 (2021) 531–541

- Opioids remain an integral part of perioperative care because of their high analgesic efficacy
- Opioids reduce propofol and inhalation anesthetic requirements
  - Most of the MAC/propofol reduction occurs at modest opioid doses
    - Egan TD; Br J Anaesth 2019; 122: e127-e135
- Opioids mitigate hyperdynamic responses to surgical insult
- Opioid-sparing NOT Opioid-free is the best approach

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**Multimodal Analgesia: Best Practice**

• “Basic” analgesic regimen

- Acetaminophen + NSAID + Dexamethasone
- + Local/regional analgesia

• Additional analgesic intervention only if basic analgesics not adequate

• Consider balance of efficacy and adverse event profile of the intervention

• Consider balance between invasiveness of the technique and consequences of pain

Procedure Opioid-sparing drug tablets

Abdominal Drainage	10
Open Cholecystectomy	15
Abdominal Wall Resection	10
Hernia Repair - Tissue or Mesh	10
Colostomy - Lapar or Open	10
Appendectomy - Lapar or Open	10
Open Small Bowel Resection or Enterectomy	20
Transperitoneal Robotic Surgery	10
Stoma Gastrostomy	10
Inguinal Hernia	10
Esophageal Varix Resection (Intraoperative)	10
Endoscopic Denver Hemicolectomy	10
Gastrostomy/Jejunostomy/Enteral Stoma	10
Gastric Surgery	10
Breast Biopsy or Lymphectomy	5
Lymphectomy + Sentinel Lymph Node Biopsy	5
Simple Mastectomy	5
Wide Local Excision + Sentinel Lymph Node Biopsy	20
Simple Mastectomy + Sentinel Lymph Node Biopsy	20
Neck Dissection	30
Anterior Cervical Discectomy or Axillary Lymph Node Dissection	10
Total Hip Arthroplasty	50
Total Knee Arthroplasty	50
Orbital	5

Joshi GP, Kerlet H, et al; Br J Anaesth 2017; 119: 720-2; Joshi GP, et al; Anaesthesia 2019; 74: 1298-1304 opioidprescribing.info

## SUMMARY

- Clinical benefits of opioid-sparing approach outweigh the challenges and limitations associated with opioid-free strategies
  - Benefits of opioid-free strategies are questionable and there are concerns of potential adverse effects
- Optimal multimodal technique should include combination of acetaminophen, NSAID, dexamethasone and loco/regional analgesia with opioids used for rescue

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