

# Perioperative Effects of Opioid-Free Anesthesia

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Grace Lim. Perioperative Effects of Opioid-Free Anesthesia. *Anesthesiol Case Rep* 2021;4(5):1-2.

Balanced anaesthesia is based on the use of opioids as antinociceptive drugs during the perioperative phase. There is no conclusive evidence that intraoperative opioids reduce postoperative pain scores. Opioid-Free Anaesthesia (OFA), a mix of several opioid-sparing procedures that result in no intraoperative systemic, neuraxial, or intracavitary opioid administration, is the result of an endeavour to create anti-hyperalgesic techniques to improve postoperative pain control. As a result, the goal of this study is to determine the extent to which opioid-free care is advantageous in the perioperative period, specifically the analgesic impact of this strategy.

The word "general anaesthesia" is a flexible concept with numerous definitions. Analgesia, amnesia, akinesia (immobility), and autonomic control were once thought to be the four "A" of general anaesthesia. This idea evolved into the description of general anaesthesia as a reversible condition of unconsciousness, immobility, antinociception, and Autonomic Nervous System (ANS) regulation within a controlled hemodynamic physiological stability. Amnesia, which is assumed when patients are unconscious, is another important result that can only be studied retrospectively. It is currently thought that when the other four objectives described above are met, consciousness with recall occurs only infrequently. Balanced anaesthesia, the most commonly utilised method in recent decades, is mostly dependent on the GABA-A receptor and the mu-opioid receptor. As a result, modern practise is based on a hypnotic for induction and an inhaled ether or hypnotic for unconsciousness maintenance. Opioids were once thought to be the best medicine for inhibiting autonomic nervous system reactions while maintaining hemodynamic

stability. Because nociceptive abnormalities are a major cause of hemodynamic instability and postoperative chronic pain syndrome, nociception is inextricably linked to autonomic nervous system control.

When surgical stimuli are administered, a sufficient amount of antinociception is established, and clinical responses such as heart rate and blood pressure rise no longer occur. Nonetheless, despite the absence of clinical symptoms, nociceptive activation continues during deep general anaesthesia, according to a recent clinical trial. As a result, the absence of clinical reactions does not imply a lack of nociception-specific activation. Opioids are unquestionably excellent antinociceptive drugs, and opioid administration in the perioperative period is one of the three pillars of balanced anaesthesia. The approach of administering opioids before to surgery has been tried as a tactic to lessen postoperative discomfort. A recent meta-analysis of 20 randomised controlled trials showed, however, that there is no strong evidence that preventive opioids reduce pain scores. Perioperative opioid administration is also known to predispose to long-term opioid usage.

Despite the present trend toward personalised anaesthetic techniques and the growing number of physicians providing opioid-free anaesthesia, there is a shocking lack of data. Specific populations benefit from the usage of OFA, including those suffering from opioid addiction, chronic pain syndromes, morbid obesity, obstructive sleep apnea, cancer surgery, and abdominal surgery. There is evidence suggesting, when compared to opioid-based anaesthesia, opioid-free anaesthesia does not produce inferior results in terms of pain scores or opioid intake in the postoperative period. It is also linked to less postoperative nausea and vomiting. The findings will provide information on the safety of opioid-free anaesthetic techniques.

## REFERENCES

1. Forget P. Opioid-free anaesthesia. Why and how? A contextual analysis. *Anaesthesia Critical Care & Pain Medicine*. 2019 ;38:169-72.
2. Veyckemans F. Opioid-free anaesthesia: Still a debate?. *European Journal of Anaesthesiology | EJA*. 2019 ; 36: 245-6.
3. Lavand'homme P. Opioid-free anaesthesia: Pro:damned if you don't use opioids during surgery. *European Journal of Anaesthesiology | EJA*. 2019 ; 36:247-249.
4. Mulier JP, Wouters R, Dillemans B, Dekock M. A randomized controlled, double-blind trial evaluating the effect of opioid-free versus opioid general anaesthesia on postoperative pain and discomfort measured by the QoR-40. *J Clin Anesth.* 2018;6:2.
5. Beloil H. Opioid-free anesthesia. *Best Practice & Research Clinical Anaesthesiology*. 2019; 33: 353-60.
6. Thota RS, Ramkiran S, Garg R, Goswami J, Baxi V, Thomas M. Opioid free onco-anesthesia: Is it time to convict opioids? A systematic review of literature. *J Anaesthesiol Clin Pharmacol*. 2019; 35 : 441.
7. Bhardwaj S, Garg K, Devgan S. Comparison of opioid-based and opioid-free TIVA for laparoscopic urological procedures in obese patients. *J Anaesthesiol Clin Pharmacol*. 2019; 35: 481
8. Toleska M, Dimitrovski A. Is opioid-free general anesthesia more superior for postoperative pain versus opioid general anesthesia in laparoscopic cholecystectomy. *Pril (Makedon Akad Nauk Umet Odd Med Nauki)*. 2019; 40: 81-7
9. Yap R, Nassif G, Hwang G, Mendez A, Erkan A, Kelly J, Debeche-Adams T, Albert M, Monson J. Achieving Opioid-Free Major Colorectal Surgery: Is It Possible?. *Digestive surgery*. 2020; 37:376-82.
10. Martinez MI, Fernández MÁ. Opioid-free anaesthesia for the surgical correction of abnormalities associated with brachycephalic obstructive airway syndrome in five dogs. *Companion Animal*. 2021; 26: 57-61.

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Citation: Lim G (2021) Perioperative Effects of Opioid-Free Anesthesia. *Anesthesiol Case Rep*. 4(5).

Received date: July 20, 2021; Accepted date: October 12, 2021; Published date: October 22, 2021



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