

Abstract

Purpose of review: In the past two decades, opioids have been prescribed increasingly for the treatment of various chronic pain conditions and during the perioperative period. Perioperative opioid administration is associated with well known adverse effects and recently to long-term use and poor surgical outcomes. In this context, the anesthesiologists have to face their responsibilities. The review discusses the neurophysiological basis of opioid-free anesthesia (OFA), the rational supporting its use in perioperative medicine as well as barriers and future challenges in the field.

Recent findings: OFA has gained in popularity as a way to enhance early recovery and to spare opioids for the postoperative period. Whether it is possible to deliver safe and stable anesthesia without intraoperative opioids to many patients undergoing various surgical procedures, OFA still raises questions. Accurate monitoring to measure intraoperative nociception and guide the use of adjuvants are not available. There is a need for the development of procedure-specific strategies as well as indications and contraindications to the technique. Finally, objective assessment of OFA use on patient outcomes should be recorded in large multicenter studies.

Summary: OFA stands as a new paradigm, which questions anesthesiology practice and might help to rationalize perioperative opioids use.