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Anesthetic Management of Drug-Addicted Patients: A Clinical Audit at Kouba Hospital

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Abstract

Objective: To evaluate the anesthetic management of drug-addicted patients at Kouba Hospital in 2019 and identify areas for improvement.

Materials and Methods: An audit was conducted specifically targeting anesthesiologists to evaluate their practices in the anesthetic management of drug-addicted patients. The evaluation focused on various aspects including systematic preoperative screening for drug addiction, knowledge of the substances consumed, potential drug interactions, anesthetic techniques used, and interdisciplinary collaboration.

Results: The participation rate was 88%. 36.40% of the cases were emergencies. Only 11.40% of the physicians systematically conducted preoperative screening for drug addiction. The main identified deficiencies were in the systematic screening for drug addiction during the preoperative phase and familiarity with the anesthetic management of drug-addicted patients. However, good knowledge of the drugs consumed and their effects was present among some physicians, and interdisciplinary collaboration with psychiatrists was observed in 70.80% of cases.

Conclusion: While interdisciplinary collaboration and knowledge of drugs and their effects are present, improvements are needed in the systematic screening for drug addiction during the preoperative phase and the training of anesthesiologists in the specific management of these patients. Increased awareness, continuous training, and better integration of knowledge into clinical protocols could contribute to improving outcomes and patient safety for drug-addicted patients during anesthesia.

Keywords: anesthetic management; drug-addicted patients; illicit drugs; preoperative evaluation; multidisciplinary approach; clinical audit

Introduction

The anesthetic management of drug-addicted patients presents a major challenge for anesthesiologists. These patients have complex comorbidities related to illicit drug use, requiring a multidisciplinary and personalized approach [1-4]. Anesthesiologists need to be familiar with commonly used substances, their clinical effects, potential drug interactions, as well as beneficial or detrimental anesthetic options for these patients [1-4]. Thorough preoperative evaluation is crucial in preventing complications, managing withdrawal syndromes and overdoses, and ensuring optimal care [1-4]. Anesthetic care for drug-addicted patients involves careful pain management, addressing psychological aspects, and maintaining hemodynamic control [1-4]. Transparent communication with the patient and understanding their history of addiction are essential in establishing trust and promoting optimal collaboration [1-4]. Furthermore, specific training for anesthesiologists on the challenges related to addiction is necessary to ensure safe and tailored care [1-4]. Finally, close collaboration with addiction management teams and psychiatric services is paramount in providing comprehensive and interdisciplinary care [1-4].

Objective

To evaluate the anesthetic management of drug-addicted patients at Kouba Hospital in 2019 and identify areas for improvement.

Materials and Methods

A clinical audit was conducted among anesthesiologists to evaluate their practices in the anesthetic management of drug-addicted patients. The objective of this audit was to identify strengths and areas for improvement in the care of these patients.

Participants

The participants in the audit were anesthesiologists working at Kouba Hospital.

Data Collection

Data were collected from the medical records of drug-addicted patients who underwent anesthesia at Kouba

Hospital in 2019. The collected information included systematic screening for drug addiction in the preoperative period, knowledge of the substances used, potential drug interactions, anesthetic techniques employed, and interdisciplinary collaboration with psychiatrists.

Data Analysis

The collected data were analyzed descriptively. Percentages were used to report the results.

Results

The results of the audit are as follows:

Participation rate: 88%

Emergencies: 36.40% of the cases studied were emergency interventions.

Systematic screening for drug addiction in the preoperative period: Only 11.40% of the physicians conducted this screening systematically.

Knowledge of the drugs consumed by the drug-addicted patients: 50% of the physicians had knowledge of the substances consumed.

Knowledge of the effects of drugs on anesthetic management: 77.30% of the physicians had knowledge of these effects.

Knowledge of the practice of anesthesia for drug-addicted patients: Only 16% of the physicians had sufficient knowledge of this practice.

Anesthetic techniques used: General anesthesia was proposed in 61.40% of the cases studied.

Preferred anesthetic agents: Pentothal and propofol were the most commonly used anesthetic agents.

Knowledge of anesthetic risks in drug-addicted patients: 90.9% of the physicians had knowledge of the specific risks associated with anesthetic management of drug-addicted patients.

Collaboration between the anesthesiologist and the psychiatrist: This collaboration was present in 70.80% of the cases studied.

Discussion and Comments

In our study, practitioners highlighted the frequency of encounters with drug-addicted patients in emergency or unplanned surgery situations, which aligns with existing literature [1,2]. However, systematic screening for addiction preoperatively was not consistently performed, primarily due to a lack of awareness or underestimation of the issue. Only 50% of practitioners reported knowing the substances consumed by drug-addicted patients, while 77.3% recognized the influence of these substances on anesthetic management. Contrary to literature data that mention the coexistence of all three types of addiction (active, in remission, and withdrawal) [3,4], the majority of patients encountered in our study were active drug users. A care contract was established between the healthcare team and the patient. The healthcare team committed to preventing withdrawal, treating pain and anxiety, and providing comprehensive and transparent information to the patient. The patient was encouraged to be honest during interviews and care, accept some discomfort during the adaptation phase, avoid the use of non-prescribed substances, and refrain from emotional or physical manipulation.

The most frequently encountered drugs were cannabis and heroin. Cannabis use has increased due to a decrease in its price in recent years. There is a correlation between cannabis use and other illicit drugs. As recommended by the French Society of Anesthesia and Intensive Care (SFAR) in 2009 [5], it is preferable to avoid sympathomimetic drugs to limit sympathetic activation caused by cannabis. Regarding heroin, it is crucial to consider withdrawal syndrome when treating patients. In case of overdose, there is an increased risk of sedative effects from hypnotics or morphinics used in anesthesia. For active heroin users, abrupt withdrawal is discouraged, and the use of naloxone and nalbuphine is contraindicated. The requirements for hypnotics and morphinics are increased, and substitution with oral morphine is preferable. Perioperative blood pressure instability may be observed, and multimodal analgesia with a preference for locoregional anesthesia (LRA) techniques is recommended. It is also advised to increase the bolus dosage in patient-controlled analgesia (PCA) pumps [6,7]. Regarding anesthetic techniques, whenever possible, LRA should be favored as they allow separate management of withdrawal and pain. LRA has perioperative and, especially, postoperative analgesic effects. If general anesthesia is necessary, it is recommended for short and less painful procedures or if the patient expresses a desire to sleep. High-affinity opioids such as alfentanil and sufentanil are preferred [8,9]. Half of the physicians were in favor of collaboration with psychiatrists for specialized post-discharge care. Therefore, a multidisciplinary approach involving anesthesiologists, psychiatrists, and addiction care teams is recommended, as emphasized in the introduction [10].

Conclusion

The anesthetic management of drug-addicted patients at Kouba Hospital in 2019 revealed certain shortcomings, particularly in the systematic screening for addiction preoperatively and the familiarity of anesthesiologists with the specificities of this patient population. Although some practitioners demonstrated good knowledge of the drugs consumed and their effects, as well as interdisciplinary collaboration with psychiatrists in a significant proportion of cases, improvements are needed to ensure optimal and safe care. Increased awareness among anesthesiologists regarding the issues related to addiction is crucial, as well as the systematic integration of addiction screening in preoperative evaluations. Ongoing training on this subject, combined with the development of institution-specific management protocols tailored to each facility's context, would strengthen practitioners' skills and harmonize practices. Furthermore, close and institutionalized collaboration with addiction care teams and psychiatric services is essential to provide a truly multidisciplinary and comprehensive approach. This synergy of expertise would promote optimal care, taking into account the medical, psychological, and social aspects of addiction. Finally, further research is needed to develop standardized anesthetic management algorithms adapted to different substances consumed, as well as to evaluate the impact of these measures on the clinical outcomes of drug-addicted patients. A better understanding of the specific challenges related to this population will continuously improve the quality and safety of care provided to them.

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