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LETTER TO THE EDITOR

Response to: Preemptive nebulized ketamine for pain control after tonsillectomy in children: randomized controlled trial

Em resposta a: Uso preventivo de cetamina nebulizada para controle da dor após amigdalectomia em crianças: estudo randômico e controlado

Dear Editor,

We read with great interest the article by Abdel-Ghaffar and colleagues[1] investigating the use of preemptive nebulized ketamine for pain control after tonsillectomy in 100 pediatric patients. These patients reported its effectiveness for post-tonsillectomy pain relief and is an alternative route to intravenous (IV) ketamine. This constitutes a very important advance for tonsillectomy anesthesia, as it may influence the choice of medication administration route and the prevention of inadequately treated postoperative pain, which can lead to dehydration and prolonged hospitalization. It may also be useful to avoid complications caused by systemic opioids and Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), namely respiratory depression, sedation, nausea, vomiting, and bleeding interference.

The primary outcome in the study was the consumption of rescue painkillers in the first 24 hours after surgery. However, we would like to extend the discussion to include postoperative data on sleep quality, another factor that may also be influenced by the use of preemptive nebulized ketamine. Monitoring preoperative and postoperative sleep quality using in-lab polysomnography, for example, could detect any previously non-existent sleep disturbance. This may not only be a consequence of pain, but can also be a causative agent or aggravating factor.[2] Thus, greater sleep efficiency and sleep time can be a sign of improved pain control in the postoperative period,[3] and the bidirectional association of sleep and pain are described.[4]

This could be extended to other common pediatric otorhinolaryngological surgeries, such as adenoidectomy. Studies describing a procedure using nebulized ketamine, similar to that used by Abdel-Ghaffar and colleagues,[1] reported improvements in postoperative pain[5]; however, there is a lack of clinical trials about its postoperative analgesic effects in isolated adenoidectomy, and further studies are required. These could consider the use of sleep quality as an outcome measure.

Despite the important advances made in the understanding of pain mechanisms and management, postoperative pain remains a health care issue, and is associated with a number of adverse effects. Therefore, understanding whether the use of preemptive nebulized ketamine reduces pain following pediatric otorhinolaryngological surgeries is relevant. Nebulized ketamine administration is a relatively recent practice in Medicine, and studies on its analgesic efficiency in tonsillectomy and adenoidectomy are still scarce. Hence, new clinical and experimental studies focusing on these specific associations should evaluate a range of different outcome measures, including postoperative sleep quality. This can help to promote the best choice in the route of the administration of ketamine and contribute to improved recovery and the avoidance of possible complications.

Conflicts of interest

The authors declare no conflicts of interest.

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Occupational team safety in ECT practice during the COVID-19 pandemic

Segurança ocupacional da equipe na prática de ECT durante a pandemia de COVID-19

Dear Editor,

Electroconvulsive Therapy (ECT) is a procedure indicated for the treatment of several neuropsychiatric conditions, including severe and life-threatening disorders and situations such as depression with risks of suicide or malnutrition, catatonia, refractory schizophrenia, mania with severe psychomotor agitation and status epilepticus.[1] Although this is a life-saving treatment, maintaining the ECT services during the COVID-19 pandemic has become a challenge due to the intrinsic risks of anesthetics and airway management during the procedure.[2] Anesthesia for ECT consists in the use of a short-acting hypnotic agent (propofol, etomidate, or thiopental) followed by a neuromuscular blocker, the most used is succinylcholine due to its rapid onset and offset of action. Oxygen supply is provided through a noninvasive bag and mask ventilation.[3] This is a critical point in the procedure because noninvasive ventilation poses a higher risk of contamination due to aerosol release from contaminated patients. To address this challenge, some services are using a Laryngeal Mask (LMA) for ventilation, others are trying not to ventilate patients during the procedure, using preoxygenation via a non-rebreather mask. The latter can be dangerous because the patient's oxygen saturation may drop to a level that requires some kind of ventilatory support. Although the procedure is fast enough to allow the use of LMA, the risk of contamination due to the aerosol spray does not decrease significantly; in addition, LMA can induce the patient to cough.[4]

In our ECT service, we modified the noninvasive ventilation technique (Fig. 1) by installing a HEPA (High-Efficiency Particulate Arrestance) filter between the bag and the mask to retain the viral particles. Additionally, a sterile plastic bag surrounding the mask and the patient's face is attached to the ventilatory system. This device protects against the aerosol that may escape from between the mouth and the mask and spread viral particles around the ECT room. The edge of the plastic bag can be fixed with clamps. All ventilatory material is replaced among patients. The use of low O_2 flow during ventilation is also a recommended measure. The psychiatrist, anesthesiologist, and nurses should all use personal protective equipment such as a N95 mask, face shield, gloves, and an impermeable gown.

We believe this is a safe and effective way to reduce the risk of contamination from COVID-19 during the ECT procedure.

Figure 1 Technique to reduce the risk of contamination from COVID-19 during the ECT procedure.

Conflicts of interest

The authors declare no conflicts of interest.

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