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ORIGINAL ARTICLE

Comparison of Two Analgesic Protocols for Post-tonsillectomy Pain Control in Outpatient Adults☆

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Abstract
Introduction and objectives: Tonsillectomy causes a moderate to severe postoperative pain, and its treatment is an unsolved problem.

The objective of this study was to compare the effectiveness of two analgesic protocols and their related complications.
Methods: Two groups of adult patients submitted to ambulatory tonsillectomy were studied. In Group 1, 52 patients received a combination of tramadol and NSAIDs postoperatively; in Group 2, 60 patients were treated with prednisone and NSAIDs. Two surgical techniques were used: cold dissection or dissection with electrocautery. Pain was recorded on days 4, 7 and 15, using a numerical scale from 0 to 10.
Results: Both groups showed similar pain at postoperative day 4. At day 7, pain was higher in Group 2 (P=.049), while at day 15 both groups showed only some discomfort. Sickness and vomiting was more frequent in Group 1, and haemorrhage and hospitalisation in Group 2. Cold dissection patients showed lower levels of pain at days 4 and 7, independently of analgesic protocol, and had lower haemorrhage and emergency visit rates.
Conclusions: The efficacy of both protocols was similar in terms of control of pain, with the exception of day 7; however, the protocol with prednisone showed fewer secondary effects. Patients operated using cold dissection had less pain and fewer complications.

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PALABRAS CLAVE
Amigdalectomía;
Tramadol;
Prednisona;
Dolor postoperatorio;
Complicaciones postoperatorias;
Enfermería

Comparación de 2 protocolos analgésicos en el control del dolor postamigdalectomía en pacientes adultos ambulatorios

Resumen
Introducción y objetivos: La amigdalectomía está incluida en los procedimientos quirúrgicos que producen dolor postoperatorio moderado-severo, y el control del mismo es un problema aun no resuelto.

El objetivo de este estudio es comparar la efectividad de 2 protocolos analgésicos y evaluar la frecuencia de complicaciones relacionadas con el tratamiento en ambos grupos.
Métodos: Se realizó un estudio en 2 grupos de pacientes adultos sometidos a amigdalectomía en régimen ambulatorio. El grupo 1 incluyó 52 pacientes a los cuales se trató con una combinación de tramadol y AINE, y el grupo 2 incluyó 60 pacientes tratados con prednisona y AINE. Se emplearon 2 técnicas quirúrgicas diferentes, la disección fría o la disección con electrobisturí. La valoración del dolor se realizó utilizando una escala numérica de 0 a 10 al 4.°, 7.° y 15.° día del postoperatorio.
Resultados: Al 4.° día ambos grupos presentan puntuación media de dolor similar. Los pacientes del grupo 2 presentaron más dolor al 7.° día (p = 0.049). Al 15.° día solo había pequeñas molestias en ambos grupos. Los vómitos y mareos fueron más frecuentes en el grupo 1, y los ingresos hospitalarios y las hemorragias lo fueron en el grupo 2. Los pacientes intervenidos con disección fría tuvieron menos dolor al 4.° y 7.° día, independientemente del protocolo analgésico, y presentaron menos hemorragias y visitas a urgencias.
Conclusión: La efectividad analgésica es similar para ambos protocolos, excepto al 7.° día, aunque con menos efectos secundarios en el protocolo con prednisona. Los pacientes intervenidos con disección fría presentaron menos dolor y complicaciones que los intervenidos con electrobisturí.

Introduction

Tonsillectomy is one of the most common surgical procedures performed around the globe. However, in contrast to the majority of the procedures, tonsillectomy produces a wound that heals by secondary intention, which favours the appearance of pain and secondary haemorrhage.[1] In spite of the advances in surgical and anaesthesia techniques, morbidity after tonsillectomy continues to represent an important clinical problem.[2]

To improve treatment of postoperative pain there should be optimised analgesic protocols and identification of the types of surgery that can produce intense postoperative pain.[3] Tonsillectomy is included in the surgical procedures that produce moderate-severe postoperative pain and its control is still an unsolved problem.

Postoperative pain limits recovery from surgical procedures in outpatient surgery, and inadequate analgesia can delay and prevent hospital discharge. Developing effective analgesic protocols for the treatment of postoperative pain is a priority.

The tramadol is a drug that is an agonist of the mu-opioid receptors and inhibitor of monoamine recapture and, in contrast the pure opioid agonists, it presents less risk of respiratory depression.[4] This last characteristic has led to its use in the control of postoperative pain in outpatient surgery.

Glucocorticoids such as dexamethasone, methylprednisolone and prednisone have anti-inflammatory properties[5] and are used as a coadjuvant to analgesic drugs such as non-steroidal anti-inflammatory drugs (NSAIDs) and opioids because they potentiate their action and reduce undesirable effects.

That is why the objective of this study was to compare the analgesic effectiveness of the combination of tramadol and NSAID against the combination of prednisone and NSAID and evaluate the frequency of complications related to the treatment in both groups.

Material and Method

Study Type and Design

This was a descriptive, observational and prospective study, carried out in a teaching hospital with adult patients from the Ear, Nose and Throat Service that had a tonsillectomy as an outpatient during the period between October 2009 and January 2012. The patients included in the study were divided into two groups depending on the period of time in which they were operated. Group 1 consisted of the patients intervened from 22 October 2009 to 16 December 2010, composed of 52 patients to whom Protocol 1 was applied; under Protocol 1, the analgesic treatment was formed of the combination of metamizole, tramadol, metoclopramide and omeprazole for 4 days, changing after that to the administration of the combination of ibuprofen, metamizole, paracetamol and omeprazole (Appendix 1). Group 2 consisted of the patients intervened from 13 January 2011 to 20 January 2012, composed of 60 patients to whom Protocol 2 was applied; under Protocol 2, the patients received a combination of ibuprofen, prednisone, paracetamol and