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Are we controlling postoperative pain?☆

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ABSTRACT

Introduction: Immediate postoperative pain has been underestimated and managed inadequately.
Objectives: To assess perceived pain 4 h after surgery in patients at the San Jorge University Hospital in the city of Pereira.
Materials and methods: Cross-sectional study in patients over 18 years of age was conducted between September 2nd and October 28th, 2011. Postoperative pain intensity was assessed using the Visual Analog Scale, 4 h after completing the procedure. Social, demographic, clinical and pharmacological variables were considered. The analysis was done using the SPSS 20.0 for Windows.
Results: Of the 213 postoperative patients studied, 114 (53.6%) were women and 99 (46.4%) were men, with a mean age of 47.1 ± 20.0 years. At 4 h, 51.4% of patients did not have pain control. There was a statistically significant association between lack of control and age, living in the urban area, type of surgery, non-adherence to the dose, and monotherapy analgesia.
Discussion: Inadequate pain control requires revisiting its management, ideally on the basis of clinical practice guidelines and using analgesic drugs at adequate doses and intervals.

¿Estamos controlando el dolor posquirúrgico?

Palabras clave:
Dolor posoperatorio
Analgésicos opioides
Dolor
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RESUMEN

Introducción: El dolor en el posquirúrgico inmediato ha sido subvalorado y manejado inadecuadamente.
Objetivos: Evaluar la percepción del dolor a las 4 h del postoperatorio de pacientes del Hospital Universitario San Jorge de Pereira (Colombia).
Materiales y métodos: Estudio de corte transversal en pacientes mayores de 18 años entre el 2 de septiembre y el 28 de octubre de 2011. Se valoró la intensidad del dolor postoperatorio

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mediante escala visual analógica a las 4 h del procedimiento. Se consideraron variables sociodemográficas, clínicas y farmacológicas. El análisis se hizo con SPSS 20.0 para Windows.

Resultados: Se evaluaron 213 pacientes en postoperatorio, 114 (53,6%) mujeres y 99 (46,4%) hombres, con edad promedio de 47,1 ± 20,0 años. El 51,4% de los pacientes no tenía controlado el dolor a las 4 h. Las variables edad, residencia urbana, tipo de cirugía, incumplimiento de la dosis y monoterapia analgésica se asociaron de manera estadísticamente significativa con la falta de control.

Discusión: El inadecuado control del dolor obliga a replantear su manejo idealmente con guías de práctica clínica y con el empleo de medicamentos analgésicos a las dosis e intervalos adecuados.

Introduction

According to the International Association for the Study of Pain (I.A.S.P.), pain is an unpleasant sensory and emotional experience associated with existing or potential tissue injury.[1] Dramatic progress has been made in controlling postoperative pain and there are now multiple experts and publications in this field.[2] Despite significant interest in improving postoperative pain management, evidence shows that world prevalence of moderately intense pain in hospitalized patients ranges between 26.0%, and 33.0%, whereas prevalence of severe pain has been estimated to be between 8.0% and 13.0%.[3]Postoperative complications caused by pain in the main organ systems have been well-described. Tissue injury triggers a series of responses that may cause ventilation abnormalities (5.0–25.0% of patients), local circulation disorders, gastrointestinal and urinary disorders, and even lead to infarction or heart failure, not to mention other abnormalities in carbohydrate, lipid and protein metabolism, as well as diencephalic and cortical responses, anxiety, fear and depression, that occur when pain is not well managed.[4–6]

It is now known that adequate control of acute postoperative pain is one of the cornerstones in achieving fast postoperative recovery. Administratively, this results in shorter hospital stays and lower costs, and from the medical standpoint, it implies reduced morbidity and mortality.[7,8] Ever since the American Pain Society declared pain to be the "fifth vital sign", several initiatives have been undertaken to improve its control, including the implementation of a numerical scoring scale called the Visual Analog Scale (VAS) consisting of 10 integer numbers for the subjective measurement of pain intensity.[9,10] A pain score of 4 or more requires a comprehensive pain assessment and rapid intervention by the healthcare provider.[11,12]

Although no drug regimen has been able to completely eliminate postoperative morbidity and mortality, adequate pain management leads to early ambulation, which, together with vomiting and ileus control, oral feeding, and preoperative antibiotic therapy, is the mainstay for comprehensive postoperative management.[13] The pharmacological armamentarium for pain management available at the present time is quite broad and includes several groups such as opioids, analgesics, non-steroidal anti-inflammatory agents (NSAIDS), and local anesthetics. It is recommended to provide two analgesics with a different mechanism of action in order to achieve more effective analgesia and reduce adverse reactions with the use of a lower dose of each drug.[14]

The goal of this study was to determine perceived pain intensity in the postoperative period by means of pain assessments at 4 h using the VAS, and to determine the social, demographic, clinical and pharmacological variables associated with pain control or lack of control in patients taken to surgery at the San Jorge University Hospital in Pereira (HUSJ), in order to optimize management.

Materials and methods

A cross-sectional study was conducted at HUSJ in a population of patients over 18 years of age undergoing surgery between 7:00 am and 6:00 pm, from September 2nd to October 28th, 2011. Assessment of postoperative pain intensity was done using the VAS in millimeters (mm), in which five categories were established. Values of 0 and 100 are absolute and represent independent categories, and the following reference values were used: 0 mm absence of pain, 1–19 mm very mild pain, 20–39 mm mild pain, 40–59 mm intermediate pain, 60–79 mm severe pain, 80–99 mm very severe pain, and 100 mm the worst possible pain; scores over 40 mm were used for undefined pain. Consequently, pain was considered to be under control when scores were lower than or equal to 39 mm.[10,15–17]

Assessment was done 4 h after completion of the procedure with a view for assessing immediate postoperative pain management. Patients who could not take the test because of neurologic deficits, disabling motor disorders, mental retardation and severe mental diseases were excluded. The information was obtained through patient interviews by duly trained final-year medical students of Universidad Tecnológica in Pereira. Access to patient clinical records and surgical notes was also obtained by means of an informed consent. The data collection tool was developed by the researchers and included the following variables, besides the VAS:

Social, demographic and toxicological variables: Age, gender, health insurance regime (subsidized or contributive), socio-economic bracket (low, medium, high), education (primary, secondary, higher), place of residence (urban or rural), cigarette smoking, use of psychoactive substances, NSAIDS, steroids and anti-depressants.