

Pain treatment presentation and manual have not changed the prescription of analgesics in the postoperative period of gynecological surgeries*

Palestra e manual sobre tratamento da dor, não alteraram a prescrição de analgésicos no pós-operatório de cirurgias ginecológicas

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SUMMARY

BACKGROUND AND OBJECTIVES: The planning of analgesia to treat acute postoperative pain is critical for its effective control, because if untreated it brings noxious changes for the body. This study aimed at analyzing the change in analgesics prescription in the postoperative period of gynecological surgeries before and after a symposium and the distribution of a pain treatment manual.

METHOD: This is a prospective study with 72 patients aged between 18 and 80 years, submitted to gynecological surgeries, to evaluate the effectiveness of postoperative analgesia by the pain numerical scale and analgesics prescription before and after a presentation and the distribution of a postoperative pain treatment manual to assistant physicians, residents and intern physicians of the Gynecology Clinic of a medium-sized teaching hospital.

RESULTS: Pain intensity in the first postoperative hour was 3.62 ± 2.48 for group 1; 3.62 ± 3.65 for group 2; 2.58 ± 1.93 for group 3 ($p = 0.33$). In the 12th hour, pain intensity was 3.62 ± 2.28 , for group 1; 3.91 ± 3.26 , for group 2; 3.50 ± 2.14 , for group 3 ($p = 0.85$). In the 24th hour, mean pain intensity was 2.35 ± 1.98 , for group 1;

3.70 ± 2.75 , for group 2; 2.95 ± 1.65 , for group 3 ($p = 0.12$). In the 48th hour, mean intensity has varied from 3.00 ± 1.82 , for group 1; 3.44 ± 1.81 , for group 2; 3.33 ± 1.36 , for group 3 ($p = 0.90$). As observed, there have been no statistically significant differences between stages in the 1st, 12th, 24th e 48th postoperative hour.

CONCLUSION: Proposed intervention has not brought statistically significant changes, however the multimodal analgesic combination used has provided adequate analgesia.

Keywords: Analgesia, Gynecology, Pain evaluation, Surgery.

RESUMO

JUSTIFICATIVA E OBJETIVOS: O planejamento da analgesia no tratamento da dor aguda pós-operatória é fundamental para o seu controle efetivo, pois quando não tratada acarreta alterações nocivas ao organismo. Este estudo teve como objetivo analisar a mudança na prescrição de analgésicos no período pós-operatório de cirurgias ginecológicas antes e após a apresentação de simpósio e o fornecimento de manual sobre tratamento da dor.

MÉTODO: Estudo prospectivo com 72 pacientes, com idade entre 18 e 80 anos, submetidas à cirurgias ginecológicas, avaliando a efetividade da analgesia pós-operatória pela aplicação da escala numérica da dor e análise da prescrição dos analgésicos, antes e após a apresentação de palestra e o fornecimento de manual sobre tratamento da dor pós-operatória, para os médicos assistentes, residentes e internos da Clínica de Ginecologia de um hospital escola de médio porte.

RESULTADOS: A intensidade da dor na 1^h de pós-operatório foi de $3,62 \pm 2,48$ no grupo 1; $3,62 \pm 3,65$ no grupo 2; $2,58 \pm 1,93$ no grupo 3 ($p = 0,33$). Na 12^h, a

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intensidade da dor foi de $3,62 \pm 2,28$, no grupo 1; $3,91 \pm 3,26$, no grupo 2; $3,50 \pm 2,14$, no grupo 3 ($p = 0,85$). Na 24^ah, a média da intensidade da dor foi de $2,35 \pm 1,98$, no grupo 1; $3,70 \pm 2,75$, no grupo 2; $2,95 \pm 1,65$, no grupo 3 ($p = 0,12$). Na 48^ah, a média da intensidade variou de $3,00 \pm 1,82$, no grupo 1; $3,44 \pm 1,81$, no grupo 2; $3,33 \pm 1,36$, no grupo 3 ($p = 0,90$). Conforme observado, não houve diferenças estatisticamente significante entre as etapas na 1^a, 12^a, 24^a e 48^ah pós-operatória.

CONCLUSÃO: A intervenção proposta não gerou alterações estatisticamente significantes, porém a combinação analgésica multimodal utilizada proporcionou analgesia adequada.

Descritores: Analgesia, Avaliação da dor, Cirurgia, Ginecologia.

INTRODUCTION

Planning of analgesia to treat acute postoperative pain is critical for its effective control. In addition to improving patients' assistance, it has the advantage of accelerating their recovery, being advisable an analgesia planning tailored for each patient. It should always be multimodal, with the association of two or more peripheral or central analgesic agents or techniques, including non-pharmacological methods because the synergism between drugs and analgesic techniques decreases the use of drugs, thus minimizing their side effects and improving their analgesic activity^{1,2}.

Postoperative pain treatment is neglected and very often insufficient. Major causes of insufficient analgesia are: belief that postoperative pain is not harmful to patients or is a normal surgical consequence; fear that pain relief may mask diagnosis or signs of an adverse event; trend to underestimate and not recognize the variability of pain awareness by patients; lack of knowledge of the huge variability of analgesic needs among patients; lack of regular and frequent pain evaluation; incorrect use of relief measures; unawareness of different analgesic techniques; unawareness of analgesics pharmacokinetics and pharmacodynamics; unawareness that age and weight should be considered when deciding dose, administration route and analgesic drug; fear of opioid dependence; inadequate orientation of patients about analgesia and fear of patients to request analgesia; lack of financial resources and difficulties to supply opioid analgesics³.

Gynecologists should understand the psychosocial aspects of gynecological diseases, acknowledging the importance women give to their organic, sexual and reproductive functions. They should spend time to adequately evaluate patients and select for surgery only those nee-

ding it, to choose surgeries that would more adequately meet the needs of each patient, to learn how to preserve functions and to offer alternatives to surgical treatment, when possible. One should also stress the importance of a good dialogue with patients and their families. These aspects also reflect postoperative pain intensity, being necessary individually adequate analgesia because every patient has a type of anxiety interfering with prognosis and, as a consequence, with the effectiveness of postoperative analgesia⁴.

Surgery-related pain is widely investigated in Brazil, however it is necessary to analyze whether the analgesic therapy applied by anesthesiologists and surgeons to their patients is being successful, since studies on this subject are scarce⁵.

This study aimed at evaluating the effectiveness and type of analgesia used in the postoperative period of gynecological surgeries in the Teaching Hospital of Taubaté (HUT) before and after a presentation and the distribution of a manual on postoperative pain for physicians, residents and internists.

METHOD

This was a prospective and controlled study with random sampling, including 72 female patients aged between 18 and 80 years, submitted to gynecological surgeries in the HUT Operating Center, who were divided in three groups of 24 patients.

Pain intensity was evaluated by the pain numerical scale (PNS), according to which zero means no pain and 10 the most severe pain ever experienced by the patient.

Group 1 – Pain intensity was evaluated in the 1st, 12th, 24th and 48th hour after surgery and analgesic prescription was evaluated in the same moments.

Group 2 – A presentation was made about postoperative pain pathophysiology and treatment, followed by the distribution of a pocket manual about postoperative pain pathophysiology and treatment for physicians, residents and internists and then pain intensity and prescriptions were evaluated at the same moments as group 1.

Group 3 – Three months after the presentation about postoperative pain pathophysiology and treatment and distribution of pocket manuals about postoperative pain pathophysiology and treatment to physicians, residents and internists, pain intensity and prescriptions were evaluated in the same moments as group 1.

Group 3 aimed at analyzing whether changes after postoperative pain pathophysiology and treatment presentation and distribution of the pocket manual about postoperative pain pathophysiology and treatment were maintained.

The software JMP ® from SAS (Statistical Analysis System) Institute was used for statistical analysis of results obtained after orientations and Analysis of Variance followed by Dunnett’s test was applied with significance level < 5% (p < 0.5%).

This study was approved by the Research Ethics Committee, University of Taubaté, under protocol CEP/UNI-TAU 033/2011.

RESULTS

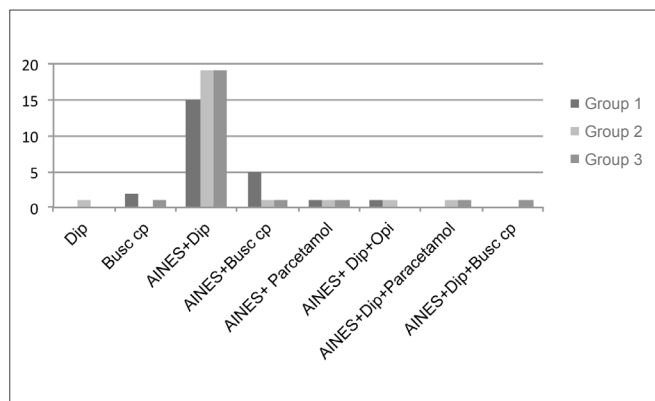
Group 1 was submitted to total abdominal hysterectomy (25%), total vaginal hysterectomy (16.66%), tubal ligation (16.66%), colpoperitoneoplasty (12.5%), bilateral ovariectomy (12.5%), exploratory laparotomy (8.33%), videolaparoscopy (4.16%), and left mastectomy (4.16%).

Group 2 was submitted to total abdominal hysterectomy (41.66%), total vaginal hysterectomy (16.66%), colpoperitoneoplasty (16.66%), videolaparoscopy (12.5%), exploratory laparotomy (4.16%), miomectomy (4.16%), and tubal ligation (4.16%).

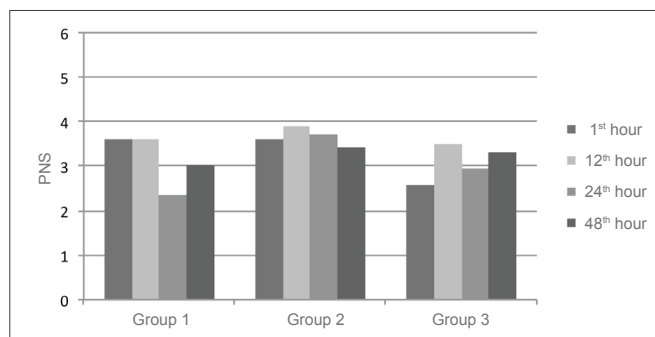
Group 3 was submitted to total abdominal hysterectomy (62.5%), total vaginal hysterectomy (20.8%), and videolaparoscopy (16.66%) As observed, there has been higher incidence of total abdominal hysterectomy (41.66%) with spinal anesthesia (80.55%) in the three groups. Most patients were pre-medicated with benzodiazepines (87.5%). With regard to medical prescription, there has been no significant difference among the three study groups, prevailing the combination of common analgesics and non-steroid anti-inflammatory drugs (NSAIDs), with the exception of two patients who also received opioid analgesics. NSAIDs were ketoprofen and tenoxicam (Graph 1).

Pain intensity by PNS in the first postoperative hour was 3.62 ± 2.48 for group 1; 3.62 ± 3.65 for group 2; and 2.58 ± 1.93 for group 3 (Graph 2), without statistically significant differences among evaluated moments (p = 0.33). In the 12th hour, pain intensity was 3.62 ± 2.28, for group 1; 3.91 ± 3.26, for group 2; and 3.50 ± 2.14, for group 3 (Graph 2), without pain intensity difference among evaluated moments (p = 0.85). In the 24th hour, mean pain intensity was 2.35 ± 1.98, for group 1; 3.70 ± 2.75 for group 2; and 2.95 ± 1.65, for group 3 (Graph 2), without statistical difference among evaluated moments (p = 0.12). In the 48th hour mean intensity was 3.00 ± 1.82, for group 1; 3.44 ± 1.81, for group 2; and 3.33 ± 1.36, for group 3 (Graph 2) without statistical difference among moments (p = 0.90).

With regard to pain intensity, in the first hour there has been predominance of moderate pain in group 1 only in the first hour, and in remaining evaluated hours most pa-



Graph 1 – Types of analgesics prescribed in the postoperative period. Dip = dipirone; Busc cp = buscopan compound; NSAIDs = non-steroid anti-inflammatory drugs; Opi = opioid.



Graph 2 – Mean pain intensity by the pain numerical scale (PNS) in among studied groups.

tients had mild pain. Group 2 had a higher number of moderate pain in the 24th hour and mild pain in remaining hours. Group 3 had also prevalence of moderate pain in the 24th hour and in remaining hours most patients had mild pain.

DISCUSSION

PNS used in this study is a very useful method to evaluate pain because it is a simple, sensitive and reproducible tool. Unidimensional tools are designed to quantify only pain severity or intensity and have been often used in hospitals and clinics to obtain fast, noninvasive and valid information about pain and analgesia⁶. However, this is a scale seldom used in the daily practice by health professionals of the studied hospital.

Final PNS scores analysis in the first postoperative hour in the three studied groups has shown mean pain intensity of 3.62 in groups 1 and 2, and of 2.58 in group 3, with predominance of no pain reported by patients. The evaluation of this hour has shown that anesthesia has induced satisfactory intra and perioperative analgesia. One may stress here the importance of regional anesthesia,

since 80.55% of patients were submitted to spinal block, which provided good analgesia. In addition, lower abdomen and gynecological tract are knowingly regions causing less postoperative pain⁷.

As to analgesic choice, it has been observed in the prescriptions of the HUT gynecology team, both in the 12th and in the 24th and 48th postoperative hours, the preference for the association of dipirone and NSAIDs (Graph 1). The difference between medical prescription stages was related to the administration route; up to the 24th hour, patients received intravenous drugs and after the 24th hour they received oral drugs. As observed from results, there has been no statistically significant difference among groups in the 12th, 24th and 48th postoperative hours and mean pain intensity was low, showing that, in general, prescription was satisfactory, however most studied patients were discharged within 24 hours, which has impaired our evaluation, being possible that these patients will have pain when returning to daily activities. Treatment is prescribed by scholars and supervised by residents and many times they simply follow an analgesic prescription pattern without valuing individual complaints, since there were patients with more severe pain who were medicated similarly to those without pain, which shows lack of dynamics and standardization of postoperative pain treatment in the sector, which has not changed even after the symposium intervention. This result confirms a previous study which showed lower quality of analgesic prescription in this sector as compared to other surgical clinics⁵.

In the hospital, pain is a common and clinically relevant experience, but in spite of advances in the understanding of its mechanisms and treatment, studies have shown that it has not been recognized and adequately treated in admitted patients⁸. The low opioid use rate in studied patients (2.77%) may be due to its side effects and to the need for a trained nursing team to early recognize possible complications and be able to promptly act when facing life threatening conditions. However, the prejudice with regard to this analgesic class should be overcome because multimodal analgesia is indicated for moderate pain.

Gynecological patients should be uniquely treated, considering their preoperative clinical condition, pain expectation, previous painful experiences and anxieties with regard to surgery. Gender-related differences in pain awareness may be associated to hyperalgesia in females, but also to the hypoactivity of females' pain inhibitory system⁹. Mean age of evaluated patients was 45 years, age of female hormonal changes, and with this they present several complaints very often neglected by health professionals.

Postoperative pain is a major clinical problem deserving

higher attention and dedication of the whole surgical team, taking into consideration an adequate intraoperative anesthesia and an effective postoperative treatment. It is not enough to evaluate pain as the fifth vital sign; it is critical that health institution chiefs feel the real need to adequately control pain, with adherence of the clinical staff, to improve patients' assistance and walk toward the objective of the "pain-free hospital"^{10,11}.

This study has shown that there were no statistically significant changes after the intervention, but in general, most patients had pain intensity mean below 5 by PNS, which has allowed an effective treatment with the association of NSAIDs and common analgesics, which was the scheme adopted by the team of this sector.

CONCLUSION

Data have shown that the proposed intervention has not generated significant changes in postoperative analgesic prescriptions, however, the multimodal analgesic combination used has provided adequate postoperative analgesia for most patients.

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