

A survey of postoperative pain experience at King Chulalongkorn Memorial Hospital: Patients' perspective

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Background : *An understanding of the postoperative pain experience from a patient's perspective is important for healthcare professionals to identify ways of improving care. The purpose of this study was to characterize postoperative pain experience, assess patient satisfaction and perceptions on postoperative pain and pain medications at King Chulalongkorn Memorial Hospital.*

Methods : *A prospective, cross-sectional study was conducted using questionnaires which contained 2 parts: part I, demographic data and information of pain management; and, part II, the patient's experience of postoperative pain management, satisfaction and perceptions on postoperative pain and pain medications.*

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Results : Two hundred and eighty patients [males = 223 (79.6%), and females = 57 (20.4%)] were enrolled in this study. 90.7% of the patients reported a lack of information related to postoperative pain management, and 93.6% preferred to learn more about postoperative pain. Assessment at 24 hours postoperatively revealed that most patients experienced mild to moderate pain at rest (65.7% and 17.5% respectively) and when on movement (27.1% and 52.9% respectively) but the pain did not have much effect on their general activities. They graded the frequency and intensity of moderately severe and severe pain to be more frequent than expected. However, most of them received immediate pain treatment (≤ 10 min) when requested with effective pain relief. Almost all of them did not hesitate to ask for rescue analgesics or were afraid of addiction. Adverse effects of pain medications (pruritus, difficulty in walking or leg numbness, drowsiness, nausea/vomiting, difficulty in thinking or urinating, and constipation) were low (0.4 - 5.0%). Most patients (98.5%) were satisfied with their postoperative care. 89.6% of the patients accepted to receive the same treatment, if they would have to undergo the same surgery again. The patients who were dissatisfied with the pain control requested to have a healthcare professional to educate them before receiving their surgery which should concern how their pain would be treated and how they could get a better pain control.

Conclusion : Most patients experienced mild to moderate pain during 24 hours postoperatively and reported satisfaction with the care. However, their feedbacks revealed the need of more education related to postoperative pain management.

Keywords : Survey, Patient's attitude, Acute postoperative pain, Education.

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สุปราณี นิรุตติศาสตร์, ปิ่น ศรีประจิดติชัย, สุกัญญา สอนพานิช, รชนีภรณ์ กู้เกียรติกุลชัย, อนันธนา ตันประยูร. การสำรวจความคิดเห็นของผู้ป่วยต่อประสบการณ์การรับบริการระดับปวดเฉียบพลันหลังการผ่าตัดในโรงพยาบาลจุฬาลงกรณ์. จุฬาลงกรณ์เวชสาร 2551 พ.ย. - ธ.ค.; 52 (6): 421 - 30

- ที่มา** : การเข้าใจความคิดเห็นของผู้ป่วยต่อประสบการณ์การระดับปวดหลังผ่าตัด เป็นสิ่งสำคัญต่อบุคลากรทางการแพทย์ มีผลช่วยพัฒนาการระดับปวดหลัง ผ่าตัดให้ดีขึ้น การศึกษานี้มีวัตถุประสงค์เพื่อสำรวจประสบการณ์ระดับปวดหลังผ่าตัด ประเมินความพึงพอใจและการรับรู้ของผู้ป่วยเกี่ยวกับความปวดหลังผ่าตัดและยาแก้ปวดที่ใช้ในโรงพยาบาลจุฬาลงกรณ์
- วิธีการศึกษา** : การศึกษาแบบพรรณนาชนิดไปข้างหน้าในช่วงเวลาหนึ่ง โดยการใช้แบบสอบถามซึ่งแบ่งเป็น 2 ส่วน ส่วนที่ 1 เป็นข้อมูลทั่วไปของผู้ป่วยและการให้บริการระดับปวด ส่วนที่ 2 เป็นประสบการณ์รับบริการระดับปวดหลังผ่าตัด ของผู้ป่วย ความพึงพอใจและการรับรู้เกี่ยวกับความปวดหลังผ่าตัดและยาแก้ปวดที่ใช้
- ผลการศึกษา** : ผู้ป่วยที่ตอบแบบสอบถามมี 280 คน (ชาย = 223 คน (ร้อยละ 79.6) และหญิง 57 คน (ร้อยละ 20.4) ผู้ป่วยที่ไม่ได้รับการอธิบายเกี่ยวกับการระดับปวดหลังผ่าตัด มีร้อยละ 90.7 และต้องการได้รับความรู้เกี่ยวกับเรื่องนี้จากบุคลากรทางการแพทย์ ร้อยละ 93.6 การประเมินระดับความแรงของความปวดที่ 24 ชั่วโมง พบว่าผู้ป่วยส่วนใหญ่มีระดับความปวดน้อยถึงปานกลางขณะนอนพัก (ร้อยละ 65.7 และ ร้อยละ 17.5 ตามลำดับ) และเมื่อมีการเคลื่อนไหว (ร้อยละ 27.1 และ ร้อยละ 52.9 ตามลำดับ) โดยความปวดมีผลรบกวนต่อการทำกิจกรรมน้อย ระดับความปวดปานกลางถึงปวดมากเมื่อเทียบกับความคาดหวังแล้วมีความถี่และความรุนแรงมากกว่าที่คิด อย่างไรก็ตามเมื่อผู้ป่วยขอยาแก้ปวดเพิ่ม ส่วนใหญ่ได้รับในเวลา น้อยกว่า 10 นาที โดยให้ผลระดับปวดได้ดี ไม่เกรงใจที่จะขอยาแก้ปวดเพิ่ม และไม่กลัวการติดยาแก้ปวด ผลข้างเคียงของยาแก้ปวด (ค้นตามตัว เดินลำบาก เพราะขาชาหรือไม่มีแรง ง่วงซึม คลื่นไส้ อาเจียน มีน้ำคั่งในช่องท้อง ปัสสาวะลำบาก และท้องผูก) มีอุบัติการณ์ต่ำ (0.4-5.0%) ผู้ป่วยส่วนใหญ่พอใจกับการระดับปวดที่ 24 ชั่วโมง (ร้อยละ 98.5) และยังยินดีได้รับการระดับปวดเช่นเดิม ถ้าต้องการมารับการผ่าตัดเดิมอีก (ร้อยละ 89.6) ผู้ป่วยที่ไม่พึงพอใจและต้องการให้มีการปรับปรุงเสนอความเห็นให้บุคลากรทางการแพทย์สอน ความรู้เกี่ยวกับการระดับปวดที่ผู้ป่วยจะได้รับก่อนผ่าตัด และขอรับการระดับปวดที่ดีกว่าเดิม

สรุป : ผู้ป่วยส่วนใหญ่มีประสบการณ์ปวดหลังผ่าตัดในระดับน้อยถึงปานกลางที่ 24 ชั่วโมงหลังผ่าตัด และพึงพอใจกับการบริการระงับปวด อย่างไรก็ตามผู้ป่วยแสดงความเห็นย้อนกลับว่าต้องการได้รับความรู้เกี่ยวกับการระงับปวดหลังผ่าตัด

คำสำคัญ : การสำรวจ, ประสบการณ์ของผู้ป่วย, ความปวดเฉียบพลันหลังผ่าตัด, การศึกษา.

Effective acute postoperative pain management could minimize surgical stress response that can lead to the decrease of cardiovascular, respiratory, gastrointestinal and thrombotic complications as well as patient's suffering. Good results of the treatment improve the patients' recovery and their satisfaction. Provision of sufficient postoperative pain relief is indicated for humanitarian reasons and has been integrated into Thai hospital quality assurance program. Although significant progress has been developed to better the understand of pathogenic mechanisms of postoperative pain and to discover new analgesics and techniques of pain control, many patients still report inadequate postoperative pain relieves.⁽¹⁻³⁾ Parts of these are from patients' ignorance and misunderstanding of postoperative care and pain management.⁽⁴⁾

The objective of this survey was to study postoperative pain experiences and to assess patients' satisfaction and their perceptions on postoperative pain and pain medications at King Chulalongkorn Memorial Hospital. The research was a part of the movement to improve acute postoperative pain control in the hospital.

Methods

This study was approved by the ethics committee of the Faculty of Medicine, Chulalongkorn University. Written, informed consent was obtained from each patient. A prospective, cross-sectional study was conducted using a questionnaire from January to July 2006. Patients who received general surgery for the first time, whose age was over 15 years old, who were capable to return to their wards

postoperatively and those who were capable of using a patient – controlled analgesia (PCA) pump were recruited into this study.

The questionnaire contained two parts, namely: part one which included general patient information, pain assessment at different spots of time (0-10 verbal numeric rating scale (VNRS), 0 = no pain, 10 = most pain imaginable) and the techniques and medications for pain control; and, part two which provided the patient's experience of postoperative pain management, satisfaction (0 - 4 satisfaction score: 0 = very dissatisfied, 1 = dissatisfied, 2 = not so bad, 3 = satisfied, 4 = most satisfied) and perceptions on postoperative pain and pain medications.

The questionnaires were filled up by one of the two anesthesiology residents who had been trained to collect the data. Face-to-face interview was done at 24-hour and 48-hour postoperatively; also, at the surgical ward, the immediate and 2-hour pain assessments were recorded by the nurses.

Results

Two hundred and eighty patients, aged 16-91 years old (mean \pm SD = 58.0 \pm 14.4 year, males = 223 (79.6%) and females = 57 (20.4%) were enrolled in the study (Table 1). The patients' levels of education were mostly high school level or higher (80.8%). The top 4 types of the general surgery were intraabdominal (39.7%), laparoscopic (17.5%), perineum (14.6%) and extremities (13.9%). Most of the cases were elective (99.3%) 95.0% of postoperative pain prescription at 24 hours and 48 hours were done by surgeons. Figure 1 showed patients' assessment of pain at the different spots of time. At 24-hour postoperatively, most of the patients experienced mild

and moderate pain at rest (65.7% and 17.5%, respectively) and when on movement (27.1% and 52.9%, respectively). The patients who experienced severe and excruciating pain immediately at ward, 2-hour, 24-hour at rest and 24-hour on movement were

8.5%, 12.5%, 6.1% and 16.4%, respectively. The techniques for postoperative pain control within 48 hours mostly were parenteral (IV, IM) or oral as needed. Morphine was the most commonly used medication via parenteral route whereas paracetamol the oral route.

Table 1. General information

Patient	Number	Percentage
Sex		
male	223	79.6
female	57	20.4
Education		
unable to read	1	0.4
primary	53	18.9
secondary	113	40.4
above secondary	113	40.4
Type of admission		
elective	278	99.3
emergency	2	0.7
Sites of surgery		
head	19	6.8
extremities	39	13.9
groin	3	1.1
perineum	41	14.6
chest	18	6.4
abdomen : upper	10	3.6
lower	90	32.2
upper and lower	11	3.9
laparoscopic	49	17.5
Postoperative pain control by		
sugeon	266	95.0
anesthesiologist	13	4.6
both	1	0.4

The patients' report of inadequate information and preference to learn more about postoperative pain management were 90.7% and 93.6%, respectively (Table 2). They graded frequency and intensity of severe and excruciating pain to be more frequent than expected (20.7%). But the pain did not have much effect on their general activities (92.2%). 93.2% of the patients received immediate pain treatment (less than 10 min) when requested with effective pain relief. The operation sites that mostly affected their activities were intraabdominal (54.5%) and the extremities (22.7%). However, most of them were not hesitated to ask for rescue analgesics (95.0%) and had no fear of addiction (97.5%). Adverse effects of pain medications at 24 hours postoperatively included nausea/vomiting (5.0%), difficulty in thinking (2.9%), constipation (2.5%), *pruritus* (1.8%), drowsiness (1.8%), difficulty in walking or leg numbness (0.4%) and difficulty in urinating (0.4%). 98.5% of the patients graded satisfaction of the pain control of 3 (satisfied) or 4 (most satisfied). The patients' acceptance to receive the same treatment for the same surgery, should they had to receive it again, was 89.6%. Those who were dissatisfied with the pain control requested to have healthcare personnel educate them before surgery on how their pain would be treated so that they would get a better pain control.

Discussion

This survey revealed the patients' concerns and needs for the information of acute postoperative pain control; this finding is also similar to a report from Germany.⁽⁵⁾ The first 48-hour postoperative pain intensity was mild to moderately severe. Almost all of the patients were not hesitated to ask for rescue

analgesics with immediate response, and they had no fear of addiction. The patients' satisfaction was high but they requested for preoperative education on postoperative pain control.

Although the policy of our department for preoperative evaluation and visit was successfully done in all the elective cases, this survey showed ineffective preoperative preparation for postoperative pain control. Also, some patients still experienced severe or excruciating pain. To improve postoperative pain control could be accomplished in some parts by improving the knowledge in this area, cooperation between surgeons and anesthesiologists together with adequate technological support. In the United Kingdom, acute pain service was started in 1990 and the national survey about 10 years later showed that the service should be improved and received more support from the government.⁽⁶⁾

This study showed that in the first 24-hour postoperatively the intravenous route as needed was used in most cases. The use of patient-controlled analgesia (PCA) and the central neural blockade was very low. The effective postoperative pain control techniques, recommended by the American Pain Society, were peripheral nerve blockade, epidural analgesia and the use of PCA.⁽⁷⁾ The development of these techniques into routine clinical practice could help improve the postoperative pain control. However, multimodal or balanced analgesia had an advantage on pain relief, decrease the dosage of each medication and also decrease side effects.⁽⁸⁻¹⁰⁾

All the patients relied on the techniques which the doctors had chosen for them as postoperative pain control. Some of these reasons could be the patient's lack of medical knowledge and trust in the doctors.

Table 2. Patients' report according to the questionnaire.

	Number	Percentage
Received the information of postoperative pain control: received / not received / NA	25 / 254 / 1	8.9 / 90.7 / 0.4
Person who provided the information anesth / surgeon / nurse	15 / 8 / 2	5.4 / 2.9 / 0.7
Time to received the information preop / postop	17 / 8	6.1 / 2.9
Need to received the information Yes / no / NA	262 / 13 / 5	93.6 / 4.6 / 1.8
At ward 24 hr :		
Pain affected activities		
no	39	14.0
mild	109	38.9
moderate	110	39.3
quite a lot	18	6.4
a lot	4	1.4
Frequency of moderate to severe pain		
no	43	15.4
seldom	140	50.0
sometimes	86	30.7
usually	9	3.2
always	2	0.7
Waiting time for receive drugs		
not ask for	90	32.1
less than 10 min	177	63.2
10 - 30 min	10	3.6
30 - 60 min	2	0.7
more than 60 min	1	0.4
Pain compared to expectation		
same	119	42.5
less than expectation	43	15.4
much less than expectation	60	21.4
more than expectation	46	16.4
much more than expectation	12	4.3

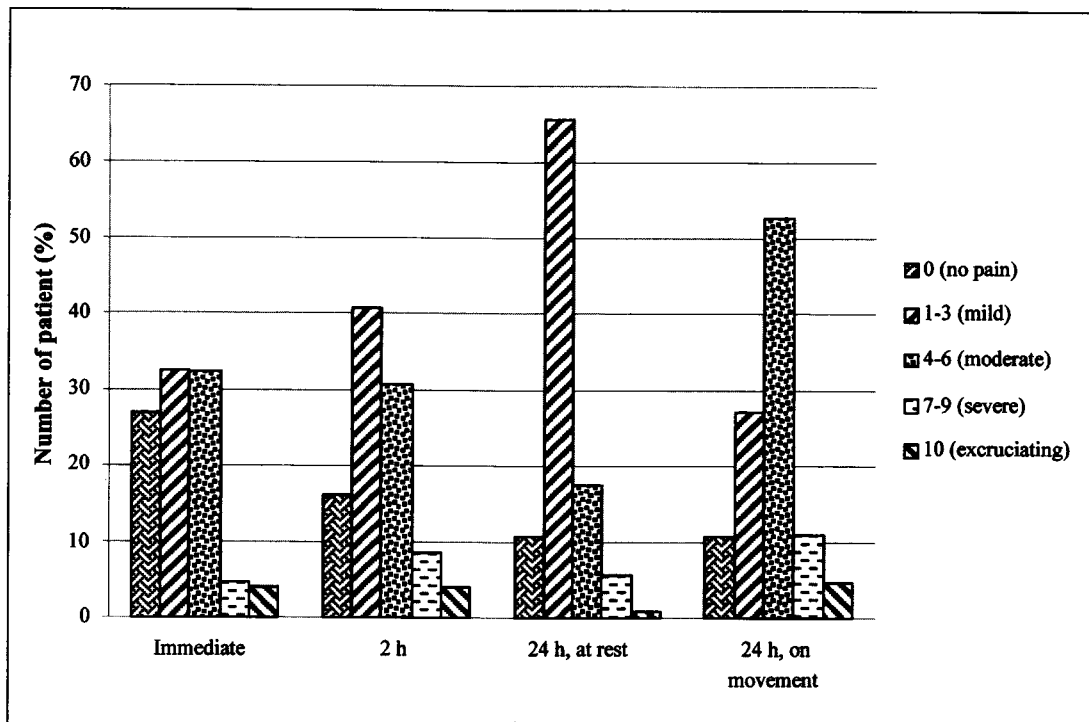


Figure 1. Postoperative pain intensity (Numeric rating scale 0 - 10)

The most common side effect of analgesic medications found in this survey was nausea/vomiting with overall low incidence of side effects. The short-response time for rescue medication which expressed the ward nurses' attention for the patients' pain together with the face-to-face response to the questionnaire which resulted in high satisfaction of the patients. The patients' feedback to learn more about postoperative pain control was beneficial to improve the care.

In conclusion, the patients who underwent general surgical procedures at King Chulalongkorn Memorial Hospital experienced good postoperative pain control with high satisfaction rate, short response time for rescue analgesics and low incidence of analgesic's side effects. The patients' feedback revealed the need of patient education related to postoperative pain management.

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