Correlation between postoperative pain and patient satisfaction

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Background and
Goal of Study

Most patients are expecting to experience postoperative pain and no significant relief with analgesia.^{1,2}

Moderate to severe postoperative pain remains a clinical problem but most patients refer being satisfied with their postoperative pain management.^{1,2,3}

Our study sought to determine whether there is a relationship between postoperative pain experienced by patients scheduled to elective surgery at a university hospital and their satisfaction with pain management.

Materials and Methods

- Prospective observational study.
- Ethics committee approval; Patient consent.
- Questionnaire administered to all patients undergoing elective inpatient surgery.
- 3 random non-consecutive days.
- Excluded: expected postoperative mechanical ventilation, psychiatric or neurologic disorder, patient refusal, day case procedures, cardiothoracic procedures.
- The pain at rest and dynamic pain were assessed at 4, 24 and 48 hours postoperatively, as well as the worst pain experienced in between, using a numeric scale from 0 (no pain) to 10 (worst pain imaginable).
- Patient satisfaction with their pain management was ascertained (using a Likert scale).
- Spearman correlation and Friedman test (with pairwise multiple comparisons).

Results and Discussion

86 of the 115 scheduled patients were enrolled in this study.

We found a statistical significant negative correlation between the level of pain (at rest, dynamic and worst pain experienced in between) at 24 and 48 hours postoperatively and patient satisfaction with pain management (rho=-0,329 to -0,407, p<0,01).

Interestingly, there was no significant correlation between de level of pain at 4 hours and satisfaction (r=-0,059 to -1,56, p=0,151 to 0,589), despite the higher levels of pain at that time.

Correlations with patient satisfaction									
Pain	4h			24h			48h		
	at rest	dynamic	worst till 4h	at rest	dynamic	Worst from 4h to 24h	at rest	dynamic	worst from 24h till 48h
Correlation coefficient	-,111	-,156	-,059	<u>-,329*</u>	<u>-,330*</u>	<u>-,378*</u>	<u>-,407*</u>	<u>-,370*</u>	<u>-,340*</u>
Sig. (2-tailed)	,310	,151	,589	,002	,002	,000	,000	,000	,001

*p<0,01

Conclusions

The pain experienced at 24 and 48 hours postoperatively correlated with patient satisfaction with pain management. Early postoperative pain (at 4 hours postoperatively) did not influence patient satisfaction, although patients experienced higher levels of pain in this period of time.

If this results are due to patients’ expectations in the early postoperative period is yet to be determined .

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2- Gan TJ, Habib AS, Miller TE, et al. Curr. Med. Res. Opin. 2014; 30(1):149-160

3- Niemi-Murola L, Pöyhiä R, Onkinen K, et al. Pain. Manag. Nurs. 2007; 8(3):122-129