The Post-Operative Pain of the Elderly Patients

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Purpose

This study was to investigate the postoperative pain of the elderly patients who received abdominal surgery and the associated factors of postoperative pain.

Methods

Methods: A descriptive, cross-sectional study was conducted in a medical center in northern Taiwan. Patients aged over 65 years and hospitalized in the surgical wards were eligible for inclusion. Convenience sampling method was adopted and 164 patients were enrolled. The data collection included patient basic information, clinical characteristics, treatments, the Brief Pain Inventory (Taiwan version), Pain Opioid Analgesics Belief Scale, Short Portable Mental Status Questionnaire (SPMSQ), and the dosage of analgesics. Data were assessed through descriptive analyses, independent-sample t-tests, one-way ANOVA, and Pearson correlations.

Results

There was about the same number of males and females included in our study with the mean age 73.08 years old. The patients had average three chronic illnesses. Most of patients were with primary level of education. The self-recognized disease severity was most frequently assessed to be moderate. The most common modality used for postoperative pain control was morphine PCA (86%). The severity of postoperative pain was reported to be mild to moderate during the postoperative 1-3 day, and declined gradually thereafter. The average pain opioid analgesics belief scale score was 21.31, which revealed a belief about the negative effect of analgesics.

Age	Gender		Marital status		Education		Economic status	
65-69 years 36.6%	Male 50.6	%	Unmarried/widow/	21 20/	Primary school	51.2%	Well off	23.8%
70-79 years 44.5%	Female 49.4	%	divorce	21.3%	Junior high school	31.1%	Average	76.3%
> 80 years 18.9%			Married	78.7%	Senior high school	17.6%		

Self-recognized disease severity and the surgical site were the major predictive factors of postoperative pain. More severe postoperative pain was reported in the patients who were aware of higher severity (beta= .23, p < .01), whereas less pain was noted in the patients receiving lower gastro-intestinal surgery (beta= -.25, p < .01). Besides, males received higher dosage of analgesics than females during 8 to 16 hours after surgery, was also a crucial associated factor of postoperative pain (beta= .29, p < .01).

	8 hours			16 hours			72 hours		
Variables	Beta	t	р	Beta	t	р	Beta	t	р
Gender (Male=1)	-0.11	-1.21	0.23	-0.06	-0.72	0.47	0.05	0.60	0.55
Awareness of post-operative severity	0.19	2.44	0.02*	0.17	2.25	0.03*	0.23	3.03	0.00**
Surgical site	-0.05	-0.64	0.52	-0.09	-1.16	0.25	-0.25	-3.24	0.00**
Years of Education	0.01	0.11	0.91	-0.08	-0.85	0.40	-0.09	-0.99	0.32
The pain opioid analgesics belief scale	0.01	0.07	0.94	-0.01	-0.08	0.94	0.05	0.60	0.55
Mental status	-0.03	-0.36	0.72	0.06	0.67	0.51	-0.01	-0.16	0.87
The total of pain site	0.04	0.38	0.71	0.20	1.81	0.07	0.06	0.56	0.58
Chronic pain	0.01	0.08	0.93	-0.27	-1.89	0.06	-0.03	-0.23	0.82
Received drug treatment	0.07	0.38	0.71	-0.11	-0.63	0.53	-0.06	-0.36	0.72
Received other treatment	0.05	0.27	0.79	0.37	1.93	0.06	0.15	0.77	0.44

Conclusion

This study suggests that in order to optimize the management of postoperative pain for the elderly patients who receive abdominal surgery, the following factors such as the self-recognized disease severity of postoperative disease severity, surgery site, gender etc. should be assessed comprehensively. An appropriate pain control plan can be done accordingly. A pain-free postoperative care is not only for the right of human being, but also beneficial for the quality of care and patient recovery.

