



Is there real association between patient-controlled analgesia and a better long-term quality of life after major surgery?

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DEAR EDITOR,

We enjoy the reading Tai et al¹ article entitled 'An investigation of the effect of patient-controlled analgesia on long-term quality of life after major surgery: A prospective cohort study,' which has been published in the February issue of the *Journal of the Chinese Medical Association*. The authors performed a prospective cohort study to evaluate the effects of immediate postoperative patient-controlled analgesia (PCA) on the long-term quality of life (QOL), and the results showed intravenous PCA provided a better QOL in physical health; however, different PCA techniques did not statistically significant influence QOL in psychological, social relationship, or environmental domains of the World Health Organization's Quality of Life Instrument containing 26 items and four domains of health, namely, physical, emotional/psychological, social relationships, and environmental, calling WHOQOL-BREF, which is a short version of the World Health Organization Quality-100 scale or the risk of chronic postoperative pain, although the authors failed to identify any cause precipitating this result.¹

Based on the literature review, the rate of postoperative chronic pain varied greatly with the type of operation, and it develops up to 50% of patients who were treated with leg amputation, breast cancer surgery, and thoracotomy.^{2,3} We found that there was statistically significant difference of major surgery types among three groups. In fact, thorax surgery (88.1%) was predominant in epidural PCA group, and the 'supposed' 'breast surgery' might be predominant in no PCA group based on predominant distribution of female patients (76%), other surgical

sites (non-abdomen and non-thorax, 83.2%), and shorter postoperative hospital stay (median 2 days). Since both surgeries were highly risky for development of postoperative chronic pain, it is rationale to suppose that QOL might be worse in both groups. That is why the authors have a conclusion to show patients treated with intravenous PCA (patients treated with epidural PCA were not included) had a better QOL in physical health than those without PCA treatment.

We are wondering to know the response by authors.

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REFERENCES

1. Tai YH, Wu HL, Lin SP, Tsou MY, Chang KY. An investigation of the effect of patient-controlled analgesia on long-term quality of life after major surgery: A prospective cohort study. *J Chin Med Assoc* 2020;83:194–201.
2. Reddi D. Preventing chronic postoperative pain. *Anaesthesia* 2016;71 (Suppl 1):64–71.
3. Horng HC, Chen YJ, Wang PH. Painless surgery and long-term quality of life. *J Chin Med Assoc* 2020;83:325–6.

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