Role of paracervical block in reducing postoperative pain after laparoscopic hysterectomy: A systematic reivew and meta-analysis of randomized controlled trials.

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Abstract

Objective: We aimed to perform a systematic review and meta-analysis in order to evaluate the effect of para- cervical anesthetic block among women undergoing laparoscopic hysterectomy. Methods: A systematic search was done in Cochrane Library, PubMed, ISI web of science, and Scopus during January 2021. We selected randomized clinical trials (RCTs) compared paracervical anesthetic block versus normal saline (control group) among women undergoing laparoscopic hysterectomy. We pooled the contin- uous data as mean difference (MD) and dichotomous data as risk ratio (RR) with the corresponding 95% con- fidence intervals using Revman software. Our primary outcome was pain scores evaluated by visual analog scale (VAS) at 30 min and 1 hour. Our secondary outcomes were postoperative additional opioids require- ment and length of hospital stay.

Results: Three RCTs met our inclusion criteria with a total number of 233 patients. We found that paracervical anesthetic block was linked to a significant reduction in VAS pain score at 30 min and 1 hour post-hysterec- tomy (MD= -2.13, 95% CI [-3.09, -1.16], p>0.001 & MD= -1.87, 95% CI [-3.22, -0.52], p = 0.006). There was a sig- nificant decrease in additional opioids requirement postoperatively among paracervical anesthetic block group in comparison with control group (p = 0.002). No significant difference was found between both groups regarding the length of hospital stay.

Conclusion: Paracervical anesthetic block is effective in reducing postoperative pain after laparoscopic hyster- ectomy with decrease in opioids administration postoperatively.

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