

Comparison of PCA Alone and PCA with Continuous Infusion for Post-gynecologic Surgical Pain in Thai Patients  
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Patient controlled analgesia (PCA) has become a widely accepted technique for managing postoperative pain. Some studies have suggested that the use of a continuous infusion decreased pain associated with physical activity and improved quality of sleep. Other studies have questioned the routine use of background infusion as it might produce an adverse effect of analgesic overdose. Therefore we studied 72 patients undergoing gynecological procedure (abdominal hysterectomy with or without bilateral salpingoophorectomy and appendectomy) in Ramathibodi Hospital. This study was approved by the institutional review board and informed consent was obtained in every case. All patients received 7.5 mg midazolam per oral for premedication. Anesthesia was maintained with N<sub>2</sub>O : O<sub>2</sub> : isoflurane, morphine, atracurium and randomly assigned to 2 groups. Group 1 received PCA only and group 2 received PCA with morphine infusion. 1 mg/hr for 24 hours postoperatively. Initially the pain was titrated to a comfort level with intravenous morphine sulphate. PCA dose of 2 mg and 5 minutes lockout interval was set for both groups. Pain assessments, total amount of morphine, PCA demand dose and morphine side effects (respiratory depression, nausea, vomiting, sedation) were evaluated at 0, 2, 6 and 24 hours after commencing PCA.

One patient in group 1 was excluded from the study because of severe vomiting. One patient in group 2 had respiratory depression at 6 hours postoperatively. There was no statistically significant difference in patient demographics, ASA physical status, VAS pain score, sedation, nausea and vomiting. Total amount of morphine used in group 1 was not different from group 2 at 2, 6 and 24 hours ( $P > 0.05$ ). The demand doses were similar in both groups at 2, 6 hours postoperatively but group 1 was significantly higher than group 2 at 24 hours ( $22.5 \pm 10.89$  VS  $16.1 \pm 11.41$ ;  $P < 0.005$ ). We conclude that PCA with continuous infusion as compared to PCA only is comparable in pain control and patient satisfaction for post abdominal gynecological procedure with increase risk of respiratory depression. We recommend PCA only in management of postoperative gynecologic surgical instead of PCA with continuous infusion