Dexmedetomidine is an alpha-2 adrenoceptor agonist that provides sedation and has opioid-sparing effects that mitigate postoperative complications associated with opioid analgesics. The use of 1mcg/kg dexmedetomidine administered before induction of general anesthesia in patients undergoing laparoscopic cholecystectomy provided improved pain control and reduced opioid analgesic requirements. Patients over the age of 18 and with an ASA classification one to three scheduled for elective laparoscopic cholecystectomy were candidates to receive dexmedetomidine 1mcg/kg before the induction of general anesthesia. Evaluation of Morphine Milligram Equivalents (MME) received throughout the perioperative course, the presence of postoperative nausea and vomiting (PONV), total time in the post-anesthesia care unit (PACU), and highest recorded pain score were recorded. Patients receiving dexmedetomidine exhibited lower pain scores, experienced shorter time in the PACU, and had lower MME utilization. Dexmedetomidine effectively reduces opioid requirement and unwanted side effects of general anesthesia while providing improved analgesia levels and shorter lengths of stay in the hospital.

*Keywords:* dexmedetomidine, opioid-free, anesthesia, laparoscopic cholecystectomy