Dexmedetomidine may be alternative sedative for dermatologic, cosmetic surgeries

Dexmedetomidine may be an acceptable sedative to administer during dermatologic and cosmetic surgical procedures, according to findings presented at the American Society for Dermatologic Surgery annual meeting.

“Propofol and ketamine are usually used in outpatient settings, and our previous studies have documented the efficacy and safety of this combination,” Anmah M. Raj, MBBS, Dip Derm, MSc, a fellow at Cosmetique Institute in Pakistan, and colleagues wrote. “However, it is still plagued with the risk of respiratory depression, fluctuating heart rate or blood pressure, and even late recovery.”

Raj and colleagues evaluated data from a retrospective analysis of 70 consecutive ambulatory surgeries that required sedation. There was an initial loading dose of 1 µg/kg of dexmedetomidine infused over 10 minutes, with a maintenance dose of 0.7 µg/kg to 1.4 µg/kg per hour, along with 25 mg/kg to 35 mg/kg per minute of propofol.

Patients were monitored during the procedure for vital signs, respiratory depression, gagging, shivering, fluctuating hemodynamics, sedation state, and airway and motor recovery time. Postoperative complications, including nausea, vomiting or pruritus, were evaluated.

“Dexmedetomidine was found to be far superior with comparatively lesser chances of respiratory depression at doses that were enough to keep the patient pain-free,” the presentation said. Postoperative recovery time was quicker, and patients attained a modified Aldrete score of 9-10 within 11 to 12 minutes after sedative cessation. There were
minimal to no postoperative complications.

Intervention was not needed for hypotension or bradycardia. Patients who received dexmedetomidine had less pain and lower analgesic requirements. Satisfaction was rated 10 out of 10 by both patients and surgeons.

“Dexmedetomidine can be considered as an alternative sedative, or even one that is superior to traditionally used propofol and ketamine combinations, for ambulatory dermatologic and cosmetic surgical procedures,” Raj and colleagues wrote.