

## **Abstract**

D&C is one of the relatively common surgeries among women, and familiarity with analgesics and the different uses of each, along with their specific characteristics, will help determine the best and most appropriate drug to control pain in patients. The goal of the anesthesiologist is to choose a method that prevents severe hemodynamic fluctuations and ventilation of the patient and the patient wakes up faster and is transferred to recovery, which is more important in patients with specific underlying problems or inappropriate NPO conditions.

**Aim:** To compare the effect of ketofol with dexmedetomidine and isofol in anesthesia of patients candidates for dilatation and curettage to evaluate the selection of the appropriate drug in terms of better efficacy and less hemodynamic and respiratory complications.

### **Materials & Methods:**

In this study, 150 patients who were candidates for dilatation and curettage surgery with class 1 were included in the study after obtaining consent. Patients were randomly divided into three groups. The first group received ketamine + propofol, the second group received dexmedetomidine and the third group received isoflurane and propofol. Any hemodynamic changes or respiratory disturbances, including apnea or hypoventilation, loss of blood oxygen saturation, and the need for respiratory support were recorded and compared in both groups.

**Results:** The study showed that the incidence of hypoventilation and the incidence of apnea and the duration of apnea were significantly lower in the dexmedetomidine group. The incidence of hypotension is significantly higher in the isofol group. There was no significant difference in the need for drug replication and recovery time in different groups. Since dilatation and curettage surgery is an outpatient surgery, if the patient can be less disturbed in breathing, hemodynamics and consciousness during the operation, the patient can be discharged on the same day, according to the results of this It is recommended to study dexmedetomidine for anesthesia with lower risks in this surgery.

**Conclusion:** Dexmedetomidine is associated with less side effects during general anesthesia during D&C surgery and is recommended.

**Keywords:** General anesthesia, Dilatation and curettage, Ketamine, Propofol, Dexmedetomidine, Ketofol-Isoflurane