

## **Are Muscle Relaxants Needed for Nasal Intubation in Propofol and Remifentanil Anesthesia?**

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### **Abstract**

**Purpose :** The authors hypothesized that a muscle relaxant would have no meaningful difference in intubation conditions during nasal intubation under remifentanil and propofol anesthesia.

**Materials and Methods :** This parallel-group, double-blinded, randomized controlled trial included 44 patients who received saline (S group; n = 22) or rocuronium (R group; n = 22). In addition to remifentanil 0.5 µg/kg per minute and propofol 5 mg/kg per hour, propofol 0.5 mg/kg was administered until loss of consciousness. Nasal intubation was performed 10 minutes after administration of R or S 0.6 mg/kg. Significant differences in intubation conditions and salivary amylase levels before and after intubation were tested ( $P < .05$ ).

**Results :** Vocal cord status ( $P = .003$ ) and response to intubation or cuff filling ( $P = .008$ ) were significantly different, but intubation conditions were not. Salivary amylase level was significantly lower with R administration ( $P = .022$ ). No patient complained of postoperative throat pain and hoarseness.

**Conclusion :** Muscle relaxants during nasal intubation performed after bolus administration of propofol 0.9 mg/kg in addition to 10 minutes of remifentanil 0.5 µg/kg per minute plus propofol 5 mg/kg per hour are unnecessary.