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**Title:** Lidocaine administration to the laryngopharynx for inducing anesthesia before bronchoscopy: A comparative study of Jackson's spray method and ultrasonic nebulization

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**Body:** [Objective] To compare the degrees of pain experienced by patients and additional intraoperative amounts of lidocaine required when lidocaine is administered using Jackson's spray and an ultrasonic nebulization. [Methods] Forty patients who were given laryngopharyngeal anesthesia before bronchoscopy were divided into 2 groups of 20 patients each: group A, which was given 4% lidocaine 5 mL by using Jackson's spray, and group B, which was given 2% lidocaine 10 mL by using an ultrasonic nebulizer. The degrees of pain in patients evaluated on the basis of examination times, amounts of lidocaine administered during bronchoscopy, rates of lidocaine use (obtained by dividing amounts of lidocaine administered during bronchoscopy by examination times), and results of a questionnaire survey consisting of a 5-point evaluation scale for 7 items were compared between the 2 groups. [Results] There were no significant differences in examination times, amounts of lidocaine administered during bronchoscopy, and degrees of pain between the groups. However, the rates of lidocaine use in group B were significantly lower than those in group A ( $0.55 \pm 0.3$  mL/min versus  $0.38 \pm 0.2$  mL/min;  $p = 0.03$ ). An analysis based on patient age and smoking history showed that the rate of lidocaine use in group A was not significantly high in elderly persons (less than 70 years of age) and smokers ( $p = 0.05$ ). [Conclusion] In laryngopharyngeal anesthesia before bronchoscopy, the Jackson spray required a large amount of lidocaine at the time of bronchoscopic examination for bronchoscopy time, compared with the ultrasonic nebulizer.