



# Five versus ten pharyngeal sprays of 10 percent lignocaine for topical anesthesia during flexible bronchoscopy: A multicenter randomized controlled trial.

## Introduction

Ensuring adequate patient comfort is crucial during bronchoscopy. Although lignocaine spray is recommended for topical pharyngeal anesthesia, the optimum dose of sprays is unclear. We compared five vs. ten sprays of 10% lignocaine for topical anesthesia during bronchoscopy.

## Material & Methods

In this investigator-initiated, prospective, multicenter, randomized clinical trial, subjects were randomized to receive five (Group A) or ten sprays (Group B) of 10% lignocaine. The primary objective was to compare the operator-rated overall procedure satisfaction between the groups. Two hundred eighty-four subjects were randomized [143, Group A, and 141, Group B].

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## Results

Parameters	Mean (SD)		P
	Group A (5 Sprays) (N = 143)	Group B (10 Sprays) (N = 141)	
Primary objective			
Operator-rated overall procedure satisfaction (VAS)	74.1 (19.9)	74.3 (18.5)	0.93
Secondary objectives			
Patient-rated cough (VAS)	32.5 (22.9)	32.3 (22.2)	0.93
Operator-rated cough (VAS)	29.8 (22.3)	26.9 (21.5)	0.26
Time to reach the vocal cords (s)	19.7 (12.5)	20.4 (11.7)	0.64
Total procedure duration (min)	10.6 (7.4)	10.5 (8.4)	0.96
Subjects' willingness to return for the procedure [n (%)]	119 (83.2)	117 (82.9)	0.95
Total lignocaine dose (mg)	293.9 (11.6)	343.5 (10.6)	<0.001
Complications [n (%)]	14 (9.8)	14 (9.9)	0.96

The operator rated overall procedure satisfaction was similar between the groups.

The VAS scores of patient-rated cough, and operator rated cough and were also similar. The time to reach vocal cords, overall procedure duration, mean doses of sedatives, the proportion of subjects willing to return for a repeat procedure (if required), and complications were not significantly different.

Subjects in Group A received a significantly less cumulative lignocaine.

## Conclusion

Topical anesthesia with five sprays of 10% lignocaine was associated with similar operator-rated overall procedure satisfaction at a lower cumulative lignocaine exposure than ten sprays.

During bronchoscopy, five sprays of 10% lignocaine should be used for pharyngeal anesthesia.

## Reference

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