Supplementary Figures Figure E1. The spray catheter



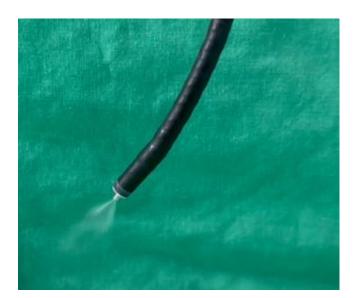
Figure E2. The spray nozzle over the tip of the catheter



Figure E3. The spray catheter inserted through the working channel of the bronchoscope



Figure E4. Lidocaine delivered through the spray nozzle



Supplementary Tables Table E1. Questionnaire (Patient)

Please circle the most appropriate statement relative to your experience with bronchoscopy

After bronchoscopy													
Discomfort from oropharyngeal anesthesia	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst
Discomfort during bronchoscopy	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst
Cough during the procedure	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst
Tolerance of the procedure	Zero	0	1	2	3	4	5	6	7	8	9	1 0	Excellent
Overall rate of satisfaction	Zero	0	1	2	3	4	5	6	7	8	9	1 0	100%
Consent to a re-examination	Absolutely unwilling	0	1	2	3	4	5	6	7	8	9	1 0	Fully willing

Table E2. Questionnaire (Operator)

Please circle the most appropriate statement relative to your experience with bronchoscopy

After bronchoscopy													
Patient discomfort	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst
Patient coughing during bronchoscopy	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst
Procedural interference due to coughing	None	0	1	2	3	4	5	6	7	8	9	1 0	Worst