

Transoral Robotic Surgery for Oropharyngeal, Hypopharyngeal and Laryngeal Cancers Without the Need for Neck Dissection

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BACKGROUND

- Transoral robotic surgery (TORS) is a minimally invasive surgical treatment for head and neck cancer patients, often with better functional preservation and lower complications after surgery.
- This study collected and analyzed all head and neck cancer patients treated with TORS without neck dissection in a single regional hospital.

METHODS

- From January 1, 2013, to December 31, 2017, those who met the diagnosis of oropharyngeal, hypopharyngeal, and laryngeal malignancies, and underwent TORS were listed as the study subjects. The data of each category were analyzed.

RESULTS

Table I Basic data

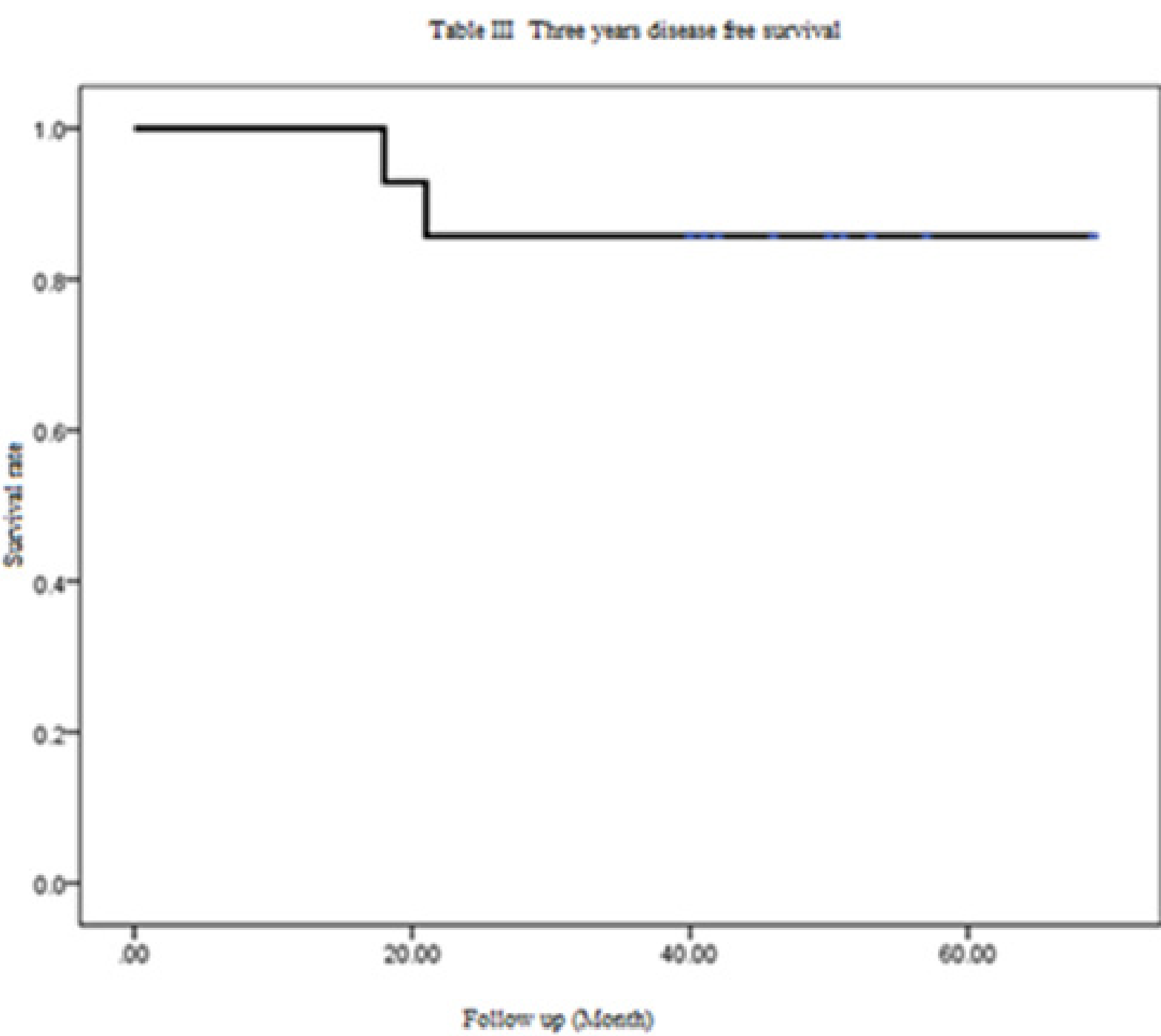
Num ber	Year	Gender	Tum or site	C linical stage	Patho logic staging	P16	CCRT	Endotracheal tube	Hospital day
1	58	M	Larynx	T1N0M0	Tis		-	0	2
2	61	M	Oropharynx	T1N0M0	T1	-	-	1	16
3	53	M	Hypopharynx	T2N0M0	T2		-	1	10
4	57	M	Hypopharynx	T2N0M0	T2		-	1	4
5	57	M	Hypopharynx	T1N0M0	T1		-	1	4
6	61	M	Hypopharynx	T1N0M0	Tis		-	1	5
7	66	M	Hypopharynx	T1N0M0	T1		-	1	9
8	62	M	Oropharynx	T1N0M0	T1	-	-	0	11
9	58	M	Hypopharynx	T1N0M0	T1		-	1	9
10	44	M	Oropharynx	T1N0M0	Tis	+	-	0	5
11	49	M	Larynx	T1N0M0	Tis		-	1	3
12	47	M	Hypopharynx	T3N0M0	T3		+	1	10
13	52	M	Oropharynx	T1N0M0	T1	-	-	1	5
14	47	M	Hypopharynx	T1N0M0	T1		-	1	10
			Oropharynx: 4 (28.6%)	Stage I: 1 (78.6%)	Tis: 4 (28.6%)				
			Hypopharynx: 8 (57.1%)	Stage II: 2 (14.3%)	T1: 7 (50.0%)				
			Larynx: 2 (14.3%)	Stage III: 1 (7.1%)	T2: 2 (14.3%)				
					T3: 1 (7.1%)				
			55.14 ± 6.6 ^a				7.1% ^b	0.79 ± 0.43 ^a	7.36 ± 3.93 ^a

a Standard deviation b Percentage

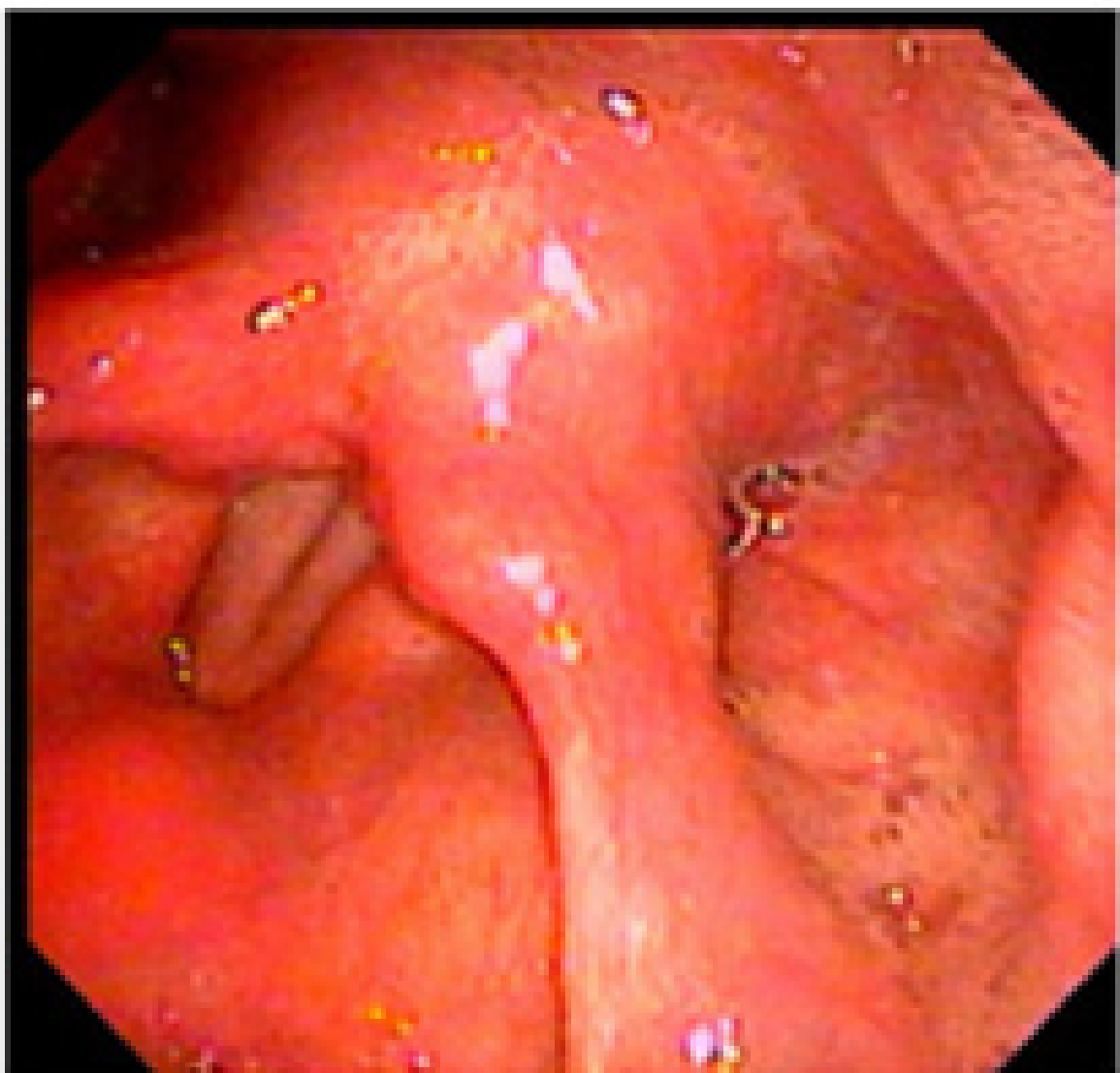
Table II Outcome

Num ber	Follow up (M)	M arg in	Local recurrence	Tim e of recurrence (M)	O rgan preservation	Tracheostom y	Nasopharyngeal tube	survival
1	69		-		+	-	-	+
2	69		+ (neck metastasis)	18	+	-	-	+
3	57		-		+	-	-	+
4	53	+	-		+	-	-	+
5	50		-		+	-	-	+
6	50		-		+	-	-	+
7	50		-		+	-	-	+
8	50		+ (primary site)	21	+	-	-	+
9	46		-		+	-	-	+
10	42		-		+	-	-	+
11	41		-		+	-	-	+
12	40		-		+	+	+	+
13	40	+	-		+	-	-	+
14	41		-		+	-	-	+
		49.93 ± 9.70 ^a	14.3% ^b	14.3% ^b	100% ^b	7.1% ^b	7.1% ^b	100% ^b

a Standard deviation b Percentage



The patients with hypopharyngeal cancer had no tumor recurrence under endoscopic tracking 46 months after surgery.



CONCLUSIONS

- This study demonstrated that TORS without neck dissection treatment for most patients with clinical stage I-II malignancies of the oropharynx, hypopharynx, and larynx obviated the need of tracheotomy and achieved organ preservation. The three-year survival rate is similar to reports published domestically and internationally.