

이하선 천엽에 국한된 이하선암종 치료로서의 이하선 천엽절제술과 전 이하선절제술과의 비교

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Superficial versus Total Parotidectomy in the Treatment of Parotid Carcinoma Confined to the Superficial Lobe of Parotid Gland

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ABSTRACT

Background and Objectives : Although there is little consensus regarding the extent of surgical ablation needed to attain cure in parotid cancers, most surgeons has been used to perform total parotidectomy. However, the chance of development for postoperative facial palsy may be increased in case of total parotidectomy. The aim of this study was to determine whether superficial parotidectomy (SP) yielded local control and resulted in overall survival rates that are comparable to those of total parotidectomy (TP). **Materials and Method** : The medical records of 82 patients who were treated at the Severance Hospital from 1991 to 2000 and diagnosed with the parotid cancers confined to the superficial lobe and had parotidectomy were reviewed. There were 42 males and 40 females, ranging in age from 8 to 84 years. There were 47 patients in group 1 (SP) and 35 in group 2 (TP). 52 patients underwent neck dissection simultaneously with primary lesion. Surgical treatment was followed by radiotherapy in 48 patients. The follow-up period ranged from 2 to 132 months with the mean of 37.7months. Data were analyzed using the Kaplan-Meier method and Log-Rank test and Fisher's exact test. **Results** : The clinical prognostic factors of SP group and TP group were not significantly associated with the following variables : histologic grade, tumor size, surgical margin, facial nerve involvement and postoperative radiotherapy. The overall crude 2- and 5- survival rates for the SP group were 87% and 79%, respectively, and those for the TP group were 80.5% and 64.9% ($p>0.05$), respectively. Also, there was no statistically significant difference in the locoregional recurrence between the SP group and TP group ($p>0.05$). However, there was statistically significant difference in the presence of postoperative facial palsy between two groups ($p<0.05$). **Conclusion** : Therefore, in terms of oncologic integrity, superficial parotidectomy may be a safe procedure (without potential morbidity, such as postoperative facial palsy) in the treatment of parotid cancer confined to the superficial lobe. (Korean J Otolaryngol 2004;47:161-7)

KEY WORDS : Parotid cancer · Parotidectomy · Survival · Facial nerve paralysis.

1~3%¹⁾ 가 (mucoepidermoid carcinoma), (adenoid cystic carcinoma), (acinic cell carcinoma), (adenocarcinoma), (malignant mixed tumor), (squamous cell carcinoma), (undifferentiated carcinoma)²⁾

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이하선 천엽에 국한된 이하선암종 치료로서의 이하선 천엽절제술과 전 이하선절제술

가 52
 , 42 27
 가
 가 20
 가 10
 5-7)
 82
 가 47 35
 가 A B
 8~18% 35~
 68% 8-11) 가
 12-15)
 20 , A 8 , B 12 , 13 (A
 4 , B 9) 가
 7 가가
 3
 1991 1 2000 12 10
 82 52
 133 가 가 8
 가 , , 가 76 46
 (subdigastric lymph node dissection)
 34 , (Supraomohyoid neck
 51 dissection) 12 ,
 가 (Modified radical neck dissection) 6
 82 , 2 , 1
 가 42 가 40 8 , ,
 84 55
 가 48 가
 76 가 , 4 , 1 1
 2 , 1 372 1 , 2 2 1 , 3 3
 1 , 4 6
 2002 AJCC T1 39 , 2 132 ,
 T2 30 , T3 7 T4가 6 37.7
 8 , level

SAS(V8.1) Fisher's exact test, Kaplan-Meier, Log-Rank. p-value가 0.05

종양의 조직학적 특성

(Mucoepidermoid carcinoma) 32 (39%) 가
 (Acinic cell carcinoma) 17 (20.7%),
 (Adenoid cystic carcinoma) 12 (14.6%),
 (Malignant mixed tumor) 6 (7.4%),
 (Basal cell carcinoma) 5 (6%),
 (Adenocarcinoma) 3 (3.6%),
 (Squamous cell carcinoma) 1 (1.3%)
 (Undifferentiated Carcinoma) 1 (1.3%)
 Kelly¹⁶⁾ (Table 1).

Table 1. Tumor histology

Tumor type	n	%
Mucoepidermoid carcinoma	32	39.0
Acinic cell carcinoma	17	20.7
Adenoid cystic cell carcinoma	12	14.6
Malignant mixed tumor	6	7.4
Basal cell carcinoma	6	7.4
Adenocarcinoma	5	6.0
Squamous cell carcinoma	3	3.6
Undifferentiated carcinoma	1	1.3
Total	82	100

(p>0.05)(Table 2).

원발병소의 크기와 침범 범위

4 cm 62, 4 cm 20
 4 cm 62 A 38, B 24
 4 cm 20 A 9, B 11

(p>0.05).

16 A 12, B 4
 (p>0.05).
 13 A 6, B 7
 (Table 2).

경부 청소술의 시행과 림프절 전이 양상

52 A B

26 (p>0.05)(Table 2). 15 (28.8%)

40%

술 후 방사선치료 유무

48 A 19
 B 29
 (p<0.05)(Table 2),

가 (p>0.05)(Fig. 2).

Table 2. Distributions of prognostic clinical factors between total parotidectomized and superficial parotidectomized patients

Clinical factors	No. of patients		p value	
	S/P (n=47)	T/P (n=35)		
Tumor grade	High-grade	13	13	0.0571
	Low-grade	34	22	
Tumor size	≥ 4 cm	9	11	0.0535
	<4 cm	38	24	
Surgical margin	Positive	12	4	0.0612
	Negative	35	31	
FN involvement	Yes	6	7	0.0517
	No	41	28	
Neck dissection	Yes	26	26	0.0778
	No	21	9	
Postoperative RTx	Yes	19	29	0.0001*
	No	28	6	

*p < 0.05, S/P : superficial parotidectomy, T/P : total parotidectomy, FN : facial nerve, RTx : radiotherapy

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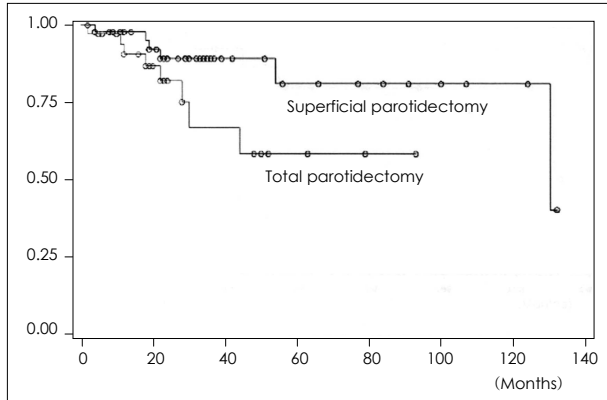


Fig. 1. There was no statistically significant difference in survival for patients undergoing superficial parotidectomy when compared with patients treated with total parotidectomy (p=0.0708).

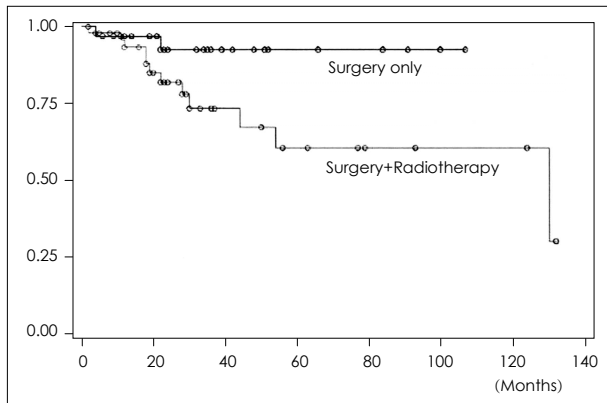


Fig. 2. There was no statistically significant difference in survival for patients undergoing radiotherapy when compared with patients treated with surgery alone (p=0.172).

가 가 13 (A : 4, B : 9) A 1 (2.3%), B 4 (15.3%)
House - Blackmann grade (p<0.05)(Table 3), B 1
4 6 .

생존율 2 5 A 87% 79% , B 80.5% 64.9% (Fig. 1).

재 발 8 (9.7%) A 1 , B 4 가 1 .

Table 3. Incidence of postoperative facial nerve paralysis

FN paralysis	No. of patients		p value
	S/P (n=43)	T/P (n=26)	
Yes	1	4	0.0011*
No	42	22	

*p<0.05, Cases of intended facial nerve dissection in the S/P (n=4) and the T/P (n=9) due to involvement of facial nerve were excluded. FN : facial nerve

Table 4. Tumor recurrence

Recurrence		No. of patients		p value
		S/P (n=47)	T/P (n=35)	
Primary	Yes	3	5	0.0712
	No	44	30	
Nodal	Yes	2	3*	0.0529
	No	42	32	

*Three patients with nodal recurrence of tumor also had primary recurrences

3 , B 5 (Table 4), 8 (Adenoid cystic carcinoma) A 1 , B 2 3 가 (Adenocarcima), (Squamous cell carcinoma) (Undifferentiated Carcinoma) B 1 3 , (Mucoepidermoid carcinoma) A 2 . 2 (Mucoepidermoid carcinoma) 가 1 . 5 , A 2 , B 3 (Table 4).

2 , 가 3 (Malignant mixed tumor) A (Squamous cell carcinoma) 1 2 , 21 , 4 .

9 . 가 3 B (Adenocarcima), (Squamous cell carcinoma) (Undifferentiated Carcinoma) 1 3 . 5 A

1 , B 4 , 가 3 , 가 1 .

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