

유두상 갑상선 암종에서 경부 림프절 전이의 양상 및 치료

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Pattern and Treatment of Papillary Thyroid Carcinoma with Cervical Lymph Node Metastasis

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ABSTRACT

Background and Objectives : Cervical lymph node metastasis develops in approximately 30% to 80% of patients with papillary thyroid carcinoma. In papillary thyroid carcinoma, lymph node metastasis at presentation do not seem to adversely affect survival, but do increase the risk of loco-regional recurrence. The management of cervical metastasis in thyroid papillary carcinoma ranges from selective removal to a formal comprehensive neck dissection. In this study, we analyzed the pattern of cervical lymph node metastasis and the impact of prognostic variables in order to plan how to manage the cervical lymph node metastasis in patients with papillary thyroid carcinoma. **Subjects and Method** : The clinical records and pathological reports of 114 patients who underwent surgery for thyroid papillary carcinoma at the Department of Otolaryngology-Head and Neck Surgery, Hanyang university from 1996 to 2002 were analyzed retrospectively. **Results** : Cervical nodal metastasis was found in 57 (50.0%) patients. Occult metastasis was found in 26 (22.8%) patients. Cervical lymph node metastasis was most frequently noted in the level VI (38.6%). The size of primary tumor and extrathyroidal invasion were associated with cervical metastasis. **Conclusion** : Based on our results, it might be suggested that elective central neck dissection is needed for patients with papillary thyroid carcinoma which is larger than 35mm or has extrathyroidal extension. (Korean J Otolaryngol 2005;48:1506-11)

KEY WORDS : Thyroid neoplasm · Papillary carcinoma · Lymphatic metastasis.

3)4) Hughes Shaha 5)
가 가
5 94%, 10
89%, 20 87% 가 .¹⁾
가
가
가 30% 80% .⁶⁻⁹⁾
. ¹⁻³⁾ 가 ,
1)9) 가
가
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30
79 58
50
8 (Table 1).
114 57 (50.0%) 가
1996 2002 7 56
1 6 1
114 35 가
114 98 (86.0%), 16 (14.0%) 31 4 가
1 : 6.1 15
73 44.6 23 58 가 26
77 47.6 22.8%(26/114) (Table 2).
level level VI가 44
(38.6%) 가 level III가 23
SPSS (20.2%), level II가 19 (16.7%), level IV가 17
v.10 chi - square test, independent (14.9%) level V가 6 (5.3%) . Level I
samples t - test, one - way ANOVA logistic regression
test p - value 0.05
level I
가
level
(clinically positive neck) level VI가 25 (22.0%) 가 level II
가 2 (1.8%), level III level IV가 1 (0.9%)
114 35 (30.7%)가 level V 가 (Fig. 1).
14 (12.3%) 3 (2.6%) , T 가 T3
가 93 level 32 (28.1%) ,
(81.6%) 35 level 25 (21.9%) . level
32 level VI가 28 (23.7%) 가
5 , level II, III가 2 (1.8%) . level

Table 1. Types of operation

	Clinically positive neck	Clinically negative neck	Total
Lobectomy	0	12	12 (10.5%)
Subtotal thyroidectomy	0	2	2 (1.8%)
Total thyroidectomy	0	7	7 (6.1%)
Total thyroidectomy & CND	5	50	55 (48.2%)
Total thyroidectomy & CND & selective neck dissection	30	8	38 (33.3%)
Total	35 (30.7%)	79 (69.3%)	114 (100%)

CND : central neck dissection

Table 2. Incidence of cervical lymph node metastasis in papillary thyroid carcinoma

	Confirmed positive cervical lymph node	Confirmed negative cervical lymph node	Total
Clinically positive neck	31 (27.2%)	4 (3.5%)	35 (30.7%)
Clinically negative neck	26 (22.8%)	53 (46.5%)	79 (69.3%)
Total	57 (50.0%)	57(50.0%)	114 (100%)

25 level III가 21 (18.47%) 가 level IV가 18 (15.8%), level II가 17 (14.9%), level VI가 17 (14.9%), level V가 6 (5.3%) .

114 가 20 , 82 12 . 12 (60.0%), 40 (48.8%) (p=0.457). level 가 7 (35.0%), 14 (17.1%) (p=0.119). level VI가 9 (45.0%) 가 level III가 8 (40.0%), level II가 6 (30.0%), level IV 가 5 (25.0%), level V가 2 (10.0%) . level VI가 32 (39.0%) 가 level III가 11 (13.4%), level II가 10 (12.2%), level IV가 9 (11.0%), level V가 4 (4.9%)

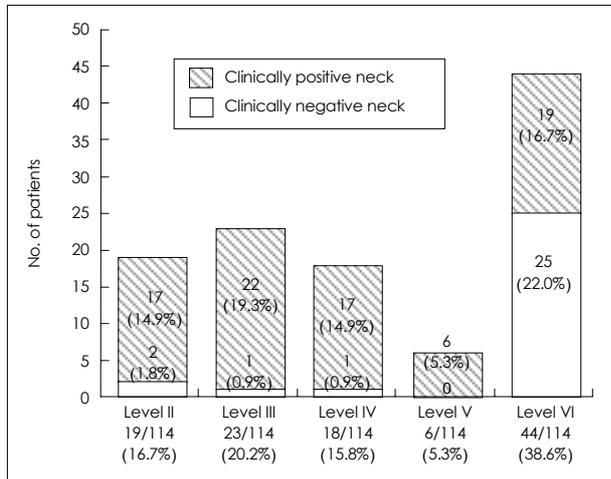


Fig. 1. The level of cervical lymph node metastasis in papillary thyroid carcinoma.

Table 3. Factors related to cervical lymph node metastasis

	level II ~ VI	Level VI	Level II ~ V	Multiple levels
Sex	0.106	0.648	0.070	0.104
Age	0.169	0.311	0.376	0.244
Diameter of primary tumor	0.000*	0.001*	0.007*	0.005*
Extrathyroidal invasion	0.047*	0.341	0.001*	0.000*

*p<0.05

(Fig. 2) level VI 가 level (one - way ANOVA test, p<0.000). 가 가 42.7 , 42.7 mm, 42.1% 가 가 46.6 , 16.0 mm, 24.6% 가 (p=0.000) (p=0.047). (p=0.106) (p=0.169) (level VI) (level II~V) level (p=0.005) (Table 3). 가 35 mm 18 16 (88.9%) 가 10 mm 18 3 (16.7%) 가 가 가 (Fig. 3). Level VI (p=0.001, Fig. 4). 114 11 (9.6%) .

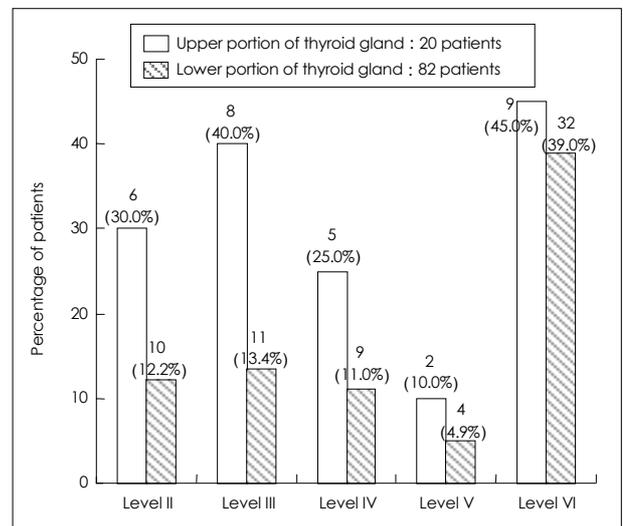


Fig. 2. The level of cervical lymph node metastasis according to location of primary tumor.

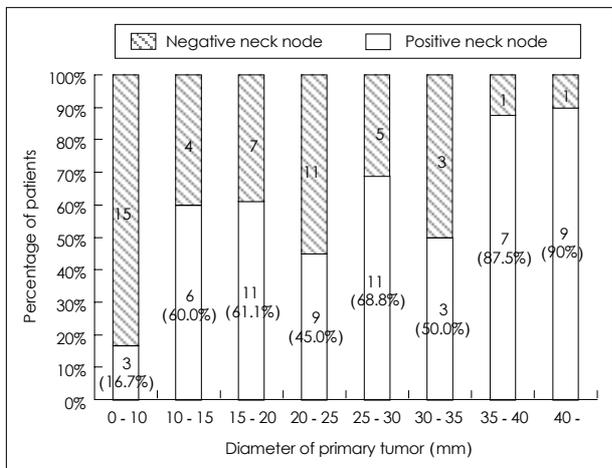


Fig. 3. Relationship between diameter of primary tumor and cervical lymph node metastasis.

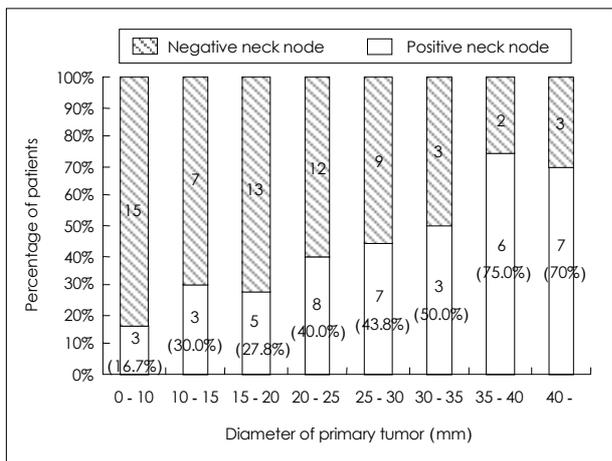


Fig. 4. Relationship between diameter of primary tumor and cervical lymph node metastasis of level VI.

2 (18.1%), 6 (54.5%), 1 (9.1%)
 가 가
 1 (9.1%)
 (p=0.026), AMES (p=0.025), TNM 3, 4 (p=0.004)

(Table 4). 44
 59 (14.6%), 3 (5.1%), 45 (7.4%), 55 (31.6%), 8 (22.2%), AMES 96 (31.6%), 5 (3.85%), 3 (22.2%), 114 (2.6%)

Table 4. Factors related to recurrence

Factors	p value
Sex	0.619
Age	0.026*
Diameter of primary tumor	0.886
Extrathyroidal invasion	0.116
Cervical node metastasis	0.751
Multiple levels metastasis	0.652
Total thyroidectomy vs Less than total thyroidectomy	0.530
Neck dissection	0.426
RI therapy	0.179
High risk group vs Low risk group (AMES)	0.000*
TNM stage (stage I, II vs stage III, IV)	0.004*

*p<0.05

가 , 3
 가 가 가 가
 가 가 가 가
 Coburn ⁴⁾ 108 46% , 31% , 17%
 Park ¹¹⁾ 238 24 (10.1%)
 114 14 (12.3%)
 가
 Noguchi ¹²⁾ 71 54 (76.1%) , Shaha ⁸⁾ 55 가
 810 61% 114 50%
 가 가 가

. Noguchi⁹⁾ 68 가 53 (77.9%) level VI 가 114 44 (38.6%), level 가 level VI 가 32 27 (84.4%) level VI 가 . Sivanandan¹³⁾ 70 80 level III가 52 (65.0%) 가 level IV가 45 (56.3%), level II가 39 (48.8%), level V가 23 (28.8%), level I 3 (3.8%) . Pingpank¹⁴⁾ level III 가 level III 가 20.2% 가 level II가 16.7%, level IV가 15.8%, level V 가 5.3% level I . Noguchi¹²⁾ 40 가 1.5 cm . Mann⁶⁾ , , 가 , . Block¹⁸⁾ 가 McHenry 19) 227 , 41%, 가 8% . 가 42.7 mm level VI 45.0%, 39.0%가 level VI level VI 가 level 가 (35.0%) (17.1%) level VI(45.0%) level II(30.0%), III(40.0%), IV(25.0%) level II(12.2%), III (13.4%), IV(11.0%) level VI(39.0%) level 가 32 16.0 mm, 42.1% 24.6% (28.1%) level 가 25 가 . level 가 가 .

가
 가 . Cady 20)
 가 가
 Coburn 4)
 가
 Hughes Shaha 5) 45
 가
 , 45
 . McHenry 19)
 227
 가 70 13
 가 157 3
 .
 11 (9.6%)
 0.751), , , ,
 45 AMES
 TNM 3
 가
 .
 가 35 mm
 ,
 level III, level IV level V
 ,
 45 , AMES
 3
 가
 :

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