

성문상부암 치료에 있어 경부청소술의 적응

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The Indication of Neck Dissection in Treatment of Supraglottic Cancer

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-ABSTRACT-

Background and Objective : In supraglottic cancer the incidence of lymph node metastasis is higher than other subsites. One of the major controversies in treatment of the supraglottic cancer is how to manage the possibility of neck disease. This study was designed to find out the incidencies of ipsilateral and contralateral lymph node metastasis and to establish the indication of neck dissection according to T stage. **Materials and Methods** : A retrospective review was undertaken of 49 cases of supraglottic carcinoma at the department of otolaryngology, Pusan National University Hospital between March 1986 and February 1992. **Results** : In our series of 49 patients, 14 cases had no neck dissection, 19 had unilateral neck dissections, and 16 underwent bilateral neck dissection. Rate of ipsilateral neck metastasis according to T stage was 0% in T₁, 40.9% in T₂, 59.1% in T₃ and 75.0% in T₄ respectively. Rate of contralateral neck metastasis according to T stage was 0% in T₁, 18.2% in T₂, 13.6% in T₃ and 0% in T₄, respectively. Seven neck failure cases were noted during follow up. Only 2 of the 30 neck dissections had recurred on previous dissected necks. The remaining 5 neck metastasis occurred in unoperated necks, only 1 of those was deemed contralateral to the primary lesion. Rate of subsequent ipsilateral neck recurrence in case of ipsilateral negative nodal metastasis during follow up was 26.6% (4/15 cases). Overall, 2 year survival rate in negative necks was 66.7%, and that of positive neck was 50.0%. **Conclusion** : Overall, incidence of ipsilateral lymph node metastasis was 51.0%. Most neck recurrences occurred in untreated or radiated ipsilateral necks. Therefore, studies indicate routine neck dissection should be considered in surgical treatment of supraglottic carcinoma. (J Clinical Otolaryngol 2002;13:111-117)

KEY WORDS : Supraglottic carcinoma · Neck dissection · Lymph node metastasis.

서 론

30%

3 85%
1)가
가

가 가

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1986

1992 111 49

49 17 (34.7%)

대상 및 방법

1986 1992

49 44 5

8.8 1

27 74 62 4

63.5 (supraglottic laryng-ectomy) 가 8 (total laryng-ectomy) 가 41

14 16

59.1%, T4 75.0% (Table 2).

Table 1. Surgery for supraglottic carcinoma (cases)

| | |
|--|-----------|
| Supraglottic laryngectomy | 3 |
| Supraglottic laryngectomy + Bilateral ND | 5 |
| Total laryngectomy | 10 |
| Total laryngectomy + T-E shunt | 1 |
| Total laryngectomy + Unilateral ND | 11 |
| Total laryngectomy + Delayed unilateral ND | 1 |
| Total laryngectomy + Unilateral ND + Hemithyroidectomy | 2 |
| Total laryngectomy + T-E shunt | 5 |
| Total laryngectomy + Bilateral ND | 2 |
| Total laryngectomy + Hemithyroidectomy | 2 |
| Total laryngectomy + T-E shunt | 7 |
| Total | 49 |

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Table 2. Incidence of ipsilateral nodal metastasis of supraglottic carcinoma (%) (n=49)

| T stage | N (+) at initial Dx (17 cases) | | N (-) at initial Dx (32 cases) | | | Total (49 cases) |
|----------------|--------------------------------|---|--------------------------------|------------------------|------------------------|------------------|
| | | | END (17 cases) N (+) | RTx (9 cases) N (+) | F/U (6 cases) N (+) | |
| T ₁ | 0/ 1 (0.0) | + | 0/ 0 (0.0) | 0/1 (0.0) | 0/0 (0.0) | 0/ 1 (0.0) |
| T ₂ | 6/22 (27.3) | | 1/ 6 (16.7) | 1/6 (16.7) | 1/4 (25.0) | 9/22 (40.9) |
| T ₃ | 9/22 (40.9) | | 3/10 (30.0) | 1/2 (50.0) | 0/1 (0.0) | 13/22 (59.1) |
| T ₄ | 2/ 4 (50.0) | | 0/ 1 (0.0) | | 1/1 (100.0) | 3/ 4 (75.0) |
| Total | 17/49 (34.7) | | 4/17 (23.5) | 2/9 (22.2) | 2/6 (33.3) | 25/49 (51.0) |

N (+) : positive nodal metastasis,
END : elective neck dissection,

N (-) : negative nodal metastasis,
RTx : radiotherapy

Table 3. Incidence of contralateral nodal metastasis of supraglottic carcinoma (%) (n=49)

| T stage | N (+) at initial Dx (5 cases) | | N (-) at initial Dx (44 cases) | | | Total (49 cases) |
|----------------|-------------------------------|---|--------------------------------|------------------------|-------------------------|------------------|
| | | | END (11 cases) N (+) | RTx (9 cases) N (+) | F/U (24 cases) N (+) | |
| T ₁ | 0/ 1 (0.0) | + | 0/ 1 (0.0) | | | 0/ 1 (0.0) |
| T ₂ | 3/22 (13.6) | | 1/ 7 (14.3) | 0/6 (0.0) | 0/ 6 (0.0) | 4/12 (18.2) |
| T ₃ | 2/22 (9.1) | | 0/ 3 (0.0) | 0/2 (0.0) | 1/15 (6.7) | 3/22 (13.6) |
| T ₄ | 0/ 4 (0.0) | | | 0/1 (0.0) | 0/ 3 (0.0) | 0/ 4 (0.0) |
| Total | 5/49 (10.2) | | 1/11 (9.1) | 0/9 (0.0) | 1/24 (4.2) | 7/49 (14.3) |

Table 4. Incidence of ipsilateral nodal metastasis in midline lesion of supraglottic carcinoma (%) (n=22)

| T stage | N (+) at initial Dx (8 cases) | | N (-) at initial Dx (19 cases) | | | Total (27 cases) |
|----------------|-------------------------------|---|--------------------------------|------------------------|------------------------|------------------|
| | | | END (7 cases) N (+) | RTx (7 cases) N (+) | F/U (5 cases) N (+) | |
| T ₁ | 0/ 1 (0.0) | + | 0/1 (0.0) | | | 0/ 1 (0.0) |
| T ₂ | 4/18 (22.2) | | 1/4 (25.0) | 1/6 (16.7) | 1/4 (25.0) | 7/18 (38.8) |
| T ₃ | 3/ 7 (42.9) | | 0/2 (0.0) | 1/1 (100.0) | 0/1 (0.0) | 4/ 7 (57.1) |
| T ₄ | 1/ 1 (100.0) | | 0/0 (0.0) | | 0/0 (0.0) | 1/ 1 (100.0) |
| Total | 8/27 (29.6) | | 1/7 (14.3) | 2/7 (28.6) | 1/5 (20.0) | 12/27 (44.4) |

Table 5. Incidence of contralateral nodal metastasis in midline lesion of supraglottic carcinoma (%) (n=22)

| T stage | N (+) at initial Dx (2 cases) | | N (-) at initial Dx (25 cases) | | | Total (27 cases) |
|----------------|-------------------------------|---|--------------------------------|------------------------|-------------------------|------------------|
| | | | END (6 cases) N (+) | RTx (7 cases) N (+) | F/U (12 cases) N (+) | |
| T ₁ | 0/ 1 (0.0) | + | 0/1 (0.0) | | | 0/ 1 (0.0) |
| T ₂ | 2/18 (11.1) | | 1/5 (20.0) | 0/6 (0.0) | 0/ 5 (0.0) | 3/18 (16.7) |
| T ₃ | 0/ 7 (0.0) | | 0/0 (0.0) | 0/1 (0.0) | 0/ 6 (0.0) | 0/ 7 (0.0) |
| T ₄ | 0/ 1 (0.0) | | | | 0/ 1 (0.0) | 0/ 1 (0.0) |
| Total | 2/27 (7.4) | | 1/6 (16.6) | 0/7 (0.0) | 0/12 (0.0) | 3/27 (11.1) |

49 5 (10.2%)

가

44 11

, 9

, 24

가

Table 6. Incidence of ipsilateral nodal metastasis in lateral lesion of supraglottic carcinoma (%) (n=22)

| T stage | N (+) at initial Dx (9 cases) | | N (-) at initial Dx (13 cases) | | | Total (22 cases) |
|----------------|-------------------------------|---|--------------------------------|------------------------|------------------------|------------------|
| | | | END (10 cases) N (+) | RTx (2 cases) N (+) | F/U (1 cases) N (+) | |
| T ₁ | | | | | | |
| T ₂ | 2/ 4 (50.0) | + | 0/ 2 (0.0) | | | = 2/ 4 (50.0) |
| T ₃ | 6/15 (40.0) | | 3/ 8 (37.5) | 0/1 (0.0) | 0/0 (0.0) | |
| T ₄ | 1/ 3 (33.3) | | | 0/1 (0.0) | 1/1 (100.0) | |
| Total | 9/22 (40.9) | | 3/10(30.0) | 0/2 (0.0) | 1/1 (100.0) | |

Table 7. Incidence of contralateral nodal metastasis in lateral lesion of supraglottic carcinoma (%) (n=22)

| T stage | N (+) at initial Dx (3 cases) | | N (-) at initial Dx (19 cases) | | | Total (22 cases) |
|----------------|-------------------------------|---|--------------------------------|------------------------|-------------------------|------------------|
| | | | END (5 cases) N (+) | RTx (2 cases) N (+) | F/U (12 cases) N (+) | |
| T ₁ | | | | | | |
| T ₂ | 1/ 4 (25.0) | + | 0/2 (0.0) | | 0/ 1 (0.0) | = 1/ 4 (25.0) |
| T ₃ | 2/15 (13.3) | | 0/3 (0.0) | 0/1 (0.0) | 1/ 9 (11.1) | |
| T ₄ | 0/ 3 (0.0) | | | 0/1 (0.0) | 0/ 2 (0.0) | |
| Total | 3/22 (13.6) | | 0/5 (0.0) | 0/2 (0.0) | 1/12 (8.3) | |

Table 8. 2-year crude survival of supraglottic carcinoma (%)

| T/N | N (-) | N(+) |
|----------------|---------------|--------------|
| T ₁ | 1/ 1 (100.0) | |
| T ₂ | 9/10 (90.0) | 4/ 8 (50.0) |
| T ₃ | 3/ 9 (33.3) | 8/12 (66.7) |
| T ₄ | 1/ 1 (100.0) | 0/ 4 (0.0) |
| Total | 14/21 (66.7) | 12/24 (50.0) |

가
 가 5
 가 1 ,
 7 (14.3%)
 가 .
 T2 18.2%, T3 13.6% (Table 3).
 가 ,
 가 34.7% ,
 , 23.5%,
 22.2%,
 33.3% .
 10.2%,
 9.1%,
 4.2% (Table 2, 3).
 가 27 ,
 22 .
 5 , 1 .

44.4%,
 59.1% (Table 4, 6).
 11.1%,
 18.2%
 (Table 5, 7).
 가
 66.7%, 가
 50.0% 가
 (Table 8).
 7 .
 2

:

39%, T2 41.5%, T3 64.5%, T4 59%

고 찰

가

가

⁵⁾

가

가

가

N0

15~20%

12~54%

²⁾³⁾

26~37%,

12~26%

⁶⁻⁹⁾ Bocca ¹⁰⁾

N0

57

34

가 10 (29.4%)

23

가

7 (30.4%)

T

가

(functional neck dissection),

. Pitman ¹¹⁾ N0

(selective neck dissection)

90%

가

가 가

가

가

가

¹²⁾ N0

가

가

가

T1, T2

가

20

T1 0%, T2 59.0%, T3

72.2%, T4 75%

65.3%

가

가

1972 Lindberg

T

55%

T1

가
 , Kirchner ¹⁶⁾ 30
 가 31.3%(10/32) 2 cm
 가 42%
 가 ,
 Johnson ¹⁷⁾ 76
 32~41% Suarez ¹⁸⁾ 20% 9%
 7~10% 가
¹³⁾
 55.1%, 44.9% NO 4.5%(2/44)
 T3 가 81.
 9% T3 29.6%
 level ,
 (jugular chain) level
 11.5%, 18.2% (upper jugular node), level (middle jugular node)
 가 (submandiblar tri-
 angle)
 Weber ¹⁴⁾ 14.3% Byers 93 , 71
 7~10% 32 level
 NO level ,
 가 ¹⁹⁾ Canela Shah 1990
 NO 78 , N+ 118
 가 51
 level
 5%, 6%
 DeSanto ¹⁵⁾ 8% 가 ²⁰⁾
 244 9%
 , 77% , 가
 14% 2 66.
 6.3 30% 7%, 55.0% .
 가 가

5 가 14.3%(7/49)

가

분

가 (p>0.05).

34.7%

51%

중심 단어 :

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