

: 56 1 1999

·	·	·	·	·	*
·	·	·	·	·	*

가

가

가

1 , 5 10%

1). , 18%

30% , 2,3)

가 , ' , ' 1.

1989 3 1997 6

가 4,5).

175

115 . 115

(azygogram) (eso- 109 , 6 가 .

phageal axis) 6), 60 (41 - 84)

7). , ,

16- 23 cm, 24- 31 cm 32 cm

, 13

가 , 73 , 29

8). Choi 4) 42

525 33.9%

16.6%

2.

Argyros 8)

Choi 2)

Type I :

Type II :

: 1998 5 15
 : 1998 12 10

가 (compression)
 (hyperemia)
 Type III : ,
 48 115 115
 11.3% (13/115), 63.4% (73/115),
 가 25.2% (29/115)
 가 가 ,
 class type I 가 58.3% (67/115),
 type II 29.6% (34/115),
 type III 12.2% (14/115) (Table 1).
 Class A :
 가 60.7% (28/46) 가 ,
 Class B : 21.7% (10/46), 10.9% (5/46)
 (Table 2). type I
 Class C : 4.8 ± 2.2 cm, type II 6.1 ± 1.9 cm, type III
 7.4 ± 1.4 cm 가
 3. 가
 (Fig. 1)(p < 0.05).
 SAS for windows 4.1 ± 1.7 cm, 5.8 ± 2.4
 cm, 5.5 ± 2.6 cm
 , chi-square test , 가
 34 (29.6%)
 (ANOVA) , type I
 Tukey method 25.3% (17/67), type II 20.5% (7/34), type
 III 71.4% (10/14)

Table 1.

	(Type I) N=67	(Type II) N=34	(Type III) N=14
*	6 (8.9%)	5(14.7%)	2(14.3%)
	41(61.2%)	23(67.6%)	9(64.3%)
	20(29.9%)	6(17.6%)	3(21.4%)
**	17(25.4%)	7(20.5%)	10(71.4%)
	50(74.6%)	27(79.4%)	4(28.6%)

* x2-test p-value= 0.319

** x2-test p-value= 0.001

Table 2.

	N=7	N=30	N=9
trachea	3	4	3
carina			1
left main bronchus	2	22	4
right main bronchus	1	1	
combined	1	3	1

Table 3.

	(Type I) N=60	(Type II) N=29	(Type III) N=12
†			
Class A	49(81.7%)	12(41.1%)	3(25.0%)
Class B	9(15.0%)	2(6.9%)	-
Class C	2(3.3%)	15(51.7%)	9(75.0%)

† x2-test p-value= 0.001

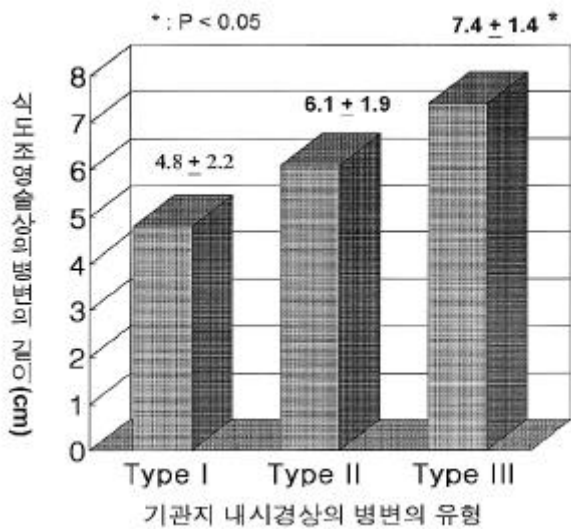


Fig. 1.

가 (Table 3), (76.5%), (52.9%), (32.4%), (17.6%), (5.9%) . X- 8.7% 가 (10/115) 가 ,

가 2.6% . type I 가 가 60 class , 81.7% (49/60) class B , 3.3% (2/60) class C . type II 41.4% (12/29) class A 51.7% (15/29) class C . type III 75% (9/12) class C 3 (25%) (Table 3).

Table 4. (type II) (type III) (

	(O.R)	95%	p- value
(cm)	1.42	1.04 - 1.94	0.02
Class A	1.00	-	
Class B	0.57	0.05 - 5.93	0.63
Class C	36.4	3.60 - 361.86	0.002
	1.00	-	
	3.24	0.47 - 22.26	0.23

‡ (univariate analysis)

가 (type type) 가 9),

가 (5 cm), 8).

class A (12/12)

type I .

가 , 가

class C

, 1가 , 19 5 . Choi 4)

type II , 2가

17 15 type II, III

type III 2가 8)

T- stage , 가 가

Type I 31 29

(93.5%) 가 가 . Watanabe

. Type II 가 ,

9 8

가 가 1 (11.1%)

3

1 10).

3.2% . 115

41.7% (48/115) Type II, III

29.4% 34

Type III 71.4% (10/14)

가 (p < 0.05).

가 type III 14 35.7% (5)

7, (class C) 가

92.3% Type II, III 4. 가

36.5% (15/41) 2가 가 3가 가

가 가 가

4, Type III 가 가

5 cm 가 (5 cm) X- (class C)

가 (p < 0.05). Watanabe 가

가 가 10. 가 가 가 가

3 가 가 가 가

가 가 가 가

가 가 가 가

9.5% (11/115) 72.7% (8/11) 가

type II

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175 115

가

1) 115
11.3% (13/115), 63.4% (73/115),
25.2% (29/115)
2) 가
가 (p < 0.05).
3) type I, II 25.3%,
20.5% type III
71.4% (10/14)
4) 가
Type III (class C)
가
3가
2가
가
X-

= Abstract =

Meanings and Indications of pretreatment assessment of esophageal carcinoma with bronchoscopy

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Objectives : To determine the yield of bronchoscopy

for evaluating tracheobronchial spread in esophageal carcinoma and to identify the conditions for bronchoscopy in patients with newly diagnosed esophageal carcinoma, who planned to be operated.

Methods : From March 1989 to June 1997, 115 patients with esophageal carcinoma had received bronchoscopy. Bronchoscopic findings were classified into three types : Type I : no definitive endobronchial lesion, Type II : indirect effects (hyperemia and compression), Type III : invasion. CT findings were classified into three classes: Class A : tumor separated from tracheobronchial tree, Class B : abutting tree, Class C : compressing tree. We investigated the correlations of clinical presentation and non-invasive tests (including esophagogram) with bronchoscopic findings.

Results :

1) Among 115 patients, bronchoscopic findings were Type I in 67(58.3%), Type II in 34(29.6%), Type III in 14(12.2%).

2) Abnormal bronchoscopic findings are related with length of lesion by esophagogram. (p < 0.05)

3) Class C lesion by chest CT scan were closely correlated with abnormal bronchoscopic findings.

4) Chest symptoms were frequently associated with type III lesion of bronchoscopy

Conclusion : We could recommend preoperative bronchoscopy in recently diagnosed as esophageal carcinoma who got more than 2 of 3 variables listed below : 1) patients who had chest symptoms, such as cough with sputum, hemoptysis, and dyspnea 2) length of tumor is long in esophagogram (above 5 cm in length), 3) tracheobronchial compressed lesion by chest CT scan.

Bronchoscopy is not needed in cases with no chest symptom, short lesion length (below 5 cm) and normal chest CT finding for preoperative evaluation of esophageal carcinoma.

Key Words : esophageal carcinoma, bronchoscopy, chest symptoms, esophagogram, chest CT, preoperative evaluation

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