

CT

1

: HRCT

: HRCT

210

1mm

, 7mm

가

(1/3),

(1/3 2/3),

(2/3)

: 210 90

가 90 73 (81.1%)

(53.3%)

가,

(32.2%) 가

(83.9%)

가

(50.0%),

(41.9%)

가

: HRCT

(1-4). CT
HRCT가
(avascular zone),

. 210 HRCT

(5-11).

가

가 90

, 90 29 HRCT, 61

, Frija (6) (9)

(n=4), (n=9), (n=17), (n=15),
(n=5), (n=4),
(n=3), (3),
(n=1) 58, 32 17
82 42.8

HRCT

GE Highspeed Advantage (GE Medical Sys- tem,
Milwaukee, U.S.A.)

5-6 slice 6-10

140kVp, 240 mAs, 1mm collimation,
7 mm (high
spatial frequency algorithm) CT

1996 7 1999 3 210
HRCT, , 가,

. Window level -600HU, Window width 1200HU

1

1997
1999 7 2 1999 10 14

가

CT

가 48 (53.3%) 가
가 29 (32.2%)

가 (V3b)가
가 (19.9%), 181
가 92 (50.8%), 36
53 (29.2%)
83.9% 가
(50.0%),
(41.9%) 가 (Fig. 3-5,
Table 1).
1/3, 1/3 2/3
, 2/3
(2.2%), 4 (4.4%), 2
(1.1%), 4 (4.4%), 1
(6.6%), 3 (3.3%) 6

90 73
(81.1%) . 90
52 (57.8%), 48 (53.3%),
44 (48.9%)
52 29 (55.8%)
(Fig. 1, 2).

가 (12).

450
181 (40.2%)

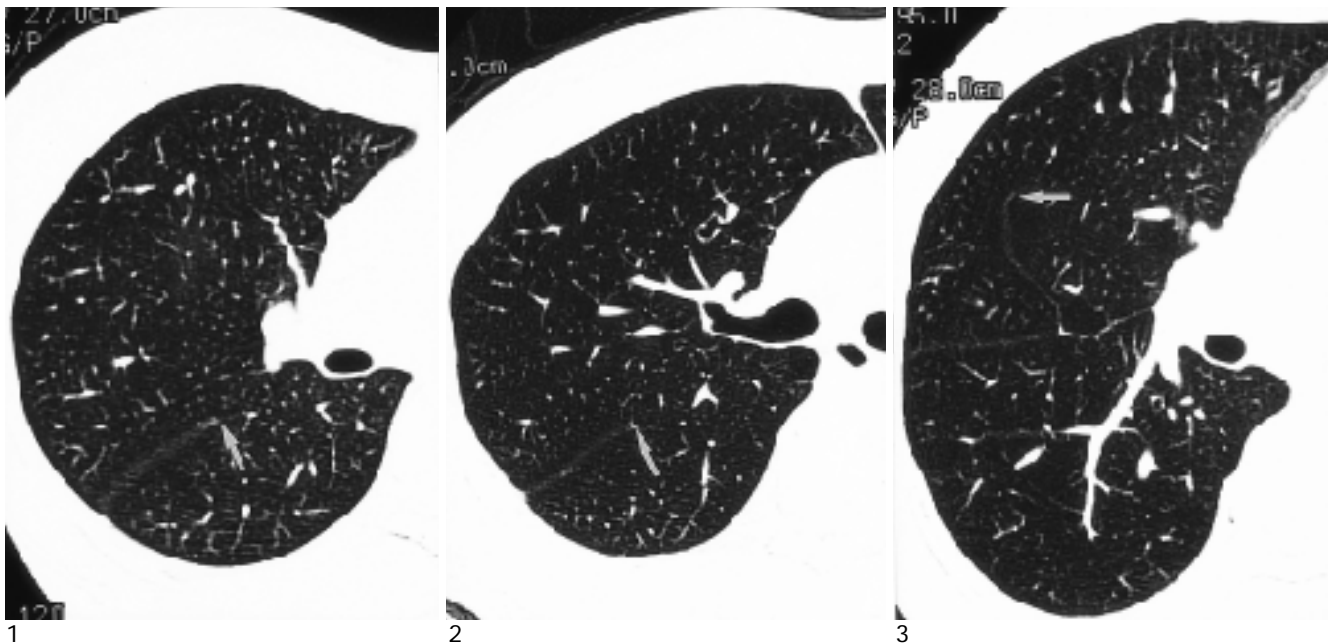


Fig. 1. CT scan at the level of bronchus intermedius shows right major fissure which has mild degree of fusion between the right upper lobe and the right lower lobe (arrow).

Fig. 2. CT scan at the level of right upper lobe bronchus shows right major fissure which has moderate degree of fusion between the right upper lobe and the right lower lobe (arrow).

Fig. 3. CT scan at the level of bronchus intermedius shows right minor fissure which has severe degree of fusion between the right upper lobe and the right middle lobe (arrow).

			(7).			62-88%	(1-4),
			(16)	CT	76-80%	(5,6,8,9)	(14), (13)
						64%, 51%	53.3%
			30-70%	(1-4).		가 5mm	scan
CT		Frija	(5)	87%	(14)	(13)	10-20mm scan
	, Glazer	(7)	(13)	64%	scan	가	
				57.8%	Glazer		
					scan		
	Medlar	(1)	18%, Yamashita	(4)	73%		
		가	CT	Frija	(5)	70%	5mm scan
	, Glazer	(50%),	(39%)		scan		
		(7,13),		48.9%			
						Frija	(5)
		Frija		70%,	73%,	37%	가
Frija				, Glazer	(7)	(13)	
				가			Frija

Table 1. Frequency and Degree of Fusion between Lobes

	RUL-RLL	RML-RLL	RUL-RML	LUP-LLL	LMP-LLL
Frequency	42/90 (46.7)	31/90 (34.4)	48/90 (53.3)	29/90 (32.2)	31/90 (34.4)
Degree mild	23/42 (54.8)	26/31 (83.9)	15/48 (31.3)	16/29 (55.2)	12/31 (38.7)
moderate	9/42 (21.4)	3/31 (9.7)	9/48 (18.8)	9/29 (31.0)	6/31 (19.4)
severe	10/42 (23.8)	2/31 (6.5)	25/48 (50.0)	4/29 (13.8)	13/31 (41.9)

RUL : right upper lobe

RML : right middle lobe

RLL : right lower lobe

LUP : upper portion of the left upper lobe

LMP : ligular division

LLL : left lower lobe

Numbers in parenthesis are percentages

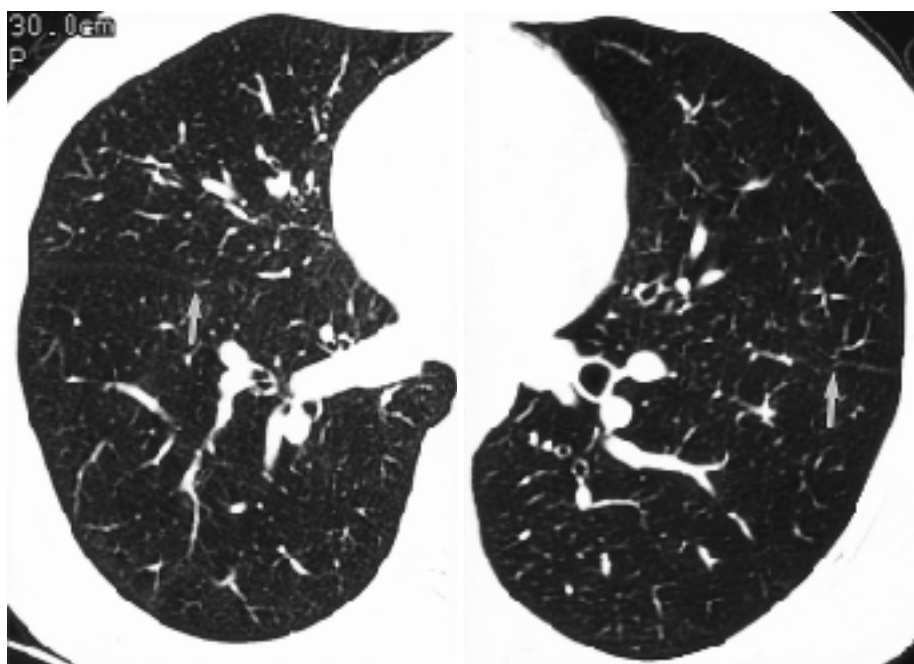


Fig. 4. CT scan at the level of left ventricle shows right major fissure which has moderate degree of fusion between the right middle lobe and the right lower lobe (arrow).

Fig. 5. CT scan at the level of left ventricle shows left major fissure which has severe degree of fusion between the left upper lobe and the left lower lobe (arrow).

(5) 57%, 30%, 37%, (13)
33%, 19% 가 , 가
Glazer (7) 18%, 16%, 40% 가

가

가

가

() 가 가

(6,9),
가

가

가

3 (55.8%)
(40.9%)

50.0%

(9) (, 16%)

가 scan
scan

가

(54.8

%), (83.9%),
(55.2%)
(50.0%)

(41.9%)

가

7mm

scan

가

scan

s-

can

, scan

가

가

가 가

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The Frequency and the Degree of Fusion of the Lung on High-Resolution CT¹

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Purpose : To evaluate the frequency and degree of fusion of the lung, as seen on high-resolution CT(HRCT).

Materials and Methods : In 210 patients high-resolution CT scans from the apex to the diaphragm were obtained at 1mm collimation and 7mm interval. We retrospectively analysed the frequency and degree of fusion of the lung bordering each interlobar fissure. Fusion of the lung was defined when fissure appeared without complete lobar separation. The degree of lung fusion was classified as mild (less than 1/3 of the fissure), moderate (greater than 1/3 and less than 2/3 of fissure), or severe (greater than 2/3 of the fissure).

Result : In 90 of 210 patients, all fissures were identified. In 73 of these 90 (81.1 %), lung fusion was noted, the most frequent site of this being between the right upper and right middle lobe (53.3 %). The least frequent site was between the upper portion of the left upper and left lower lobe (32.2 %). A mild degree of fusion was most frequently found between the right middle and right lower lobe (83.9%), while a severe degree was most frequently found between the right middle and right upper lobe (50.0%), followed by the lingular division and the left lower lobe (41.9%).

Conclusion : HRCT can be used to evaluate the frequency and degree of interlobar lung fusion.

Index words : Lung, anatomy

Lung, CT

Pleura, CT

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1)

4.0

4.0

2)

“ ”

“ (Location)

Netsite ”

Http://www.radiology.or.kr

