RECURRENT CHARACTERISTIC AFTER THORACOSCOPIC LOBECTOMY AND LYMPH NODE DISSECTION FOR NON – SMALL CELL LUNG CANCER AT 108 MILITARY CENTRAL HOSPITAL

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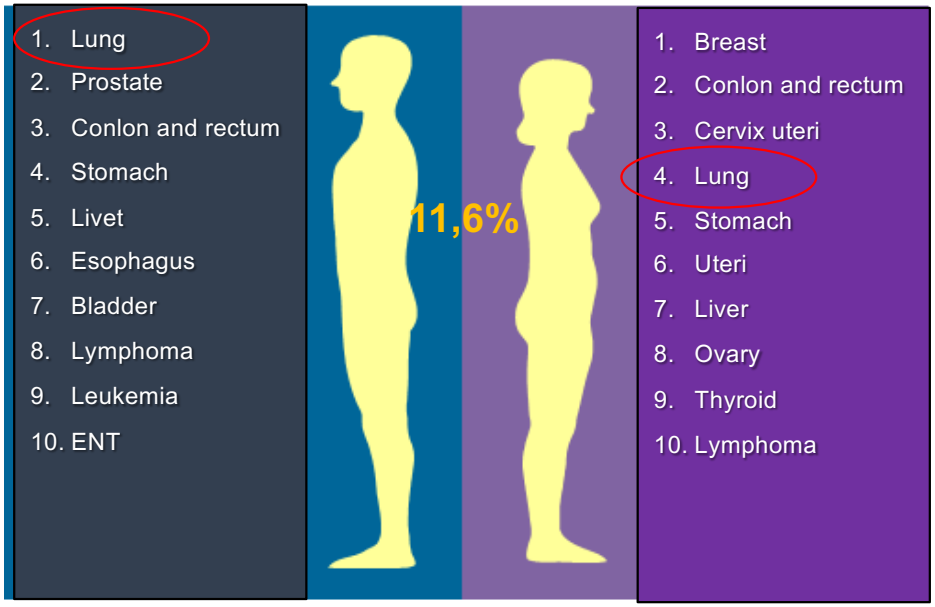
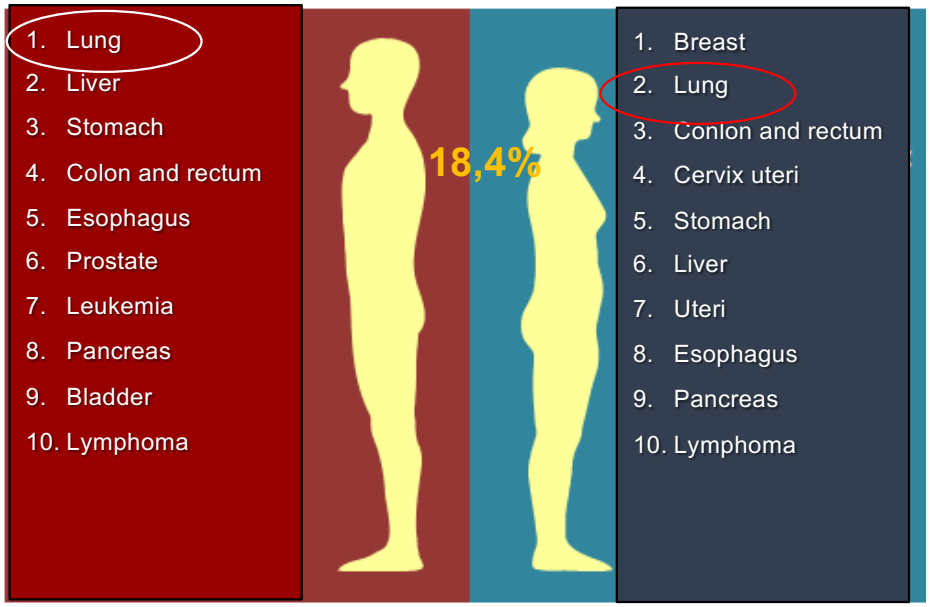
- Overview
- Material and Method
- Results and discussions
- Conclusions

Overview

Estimated incidence



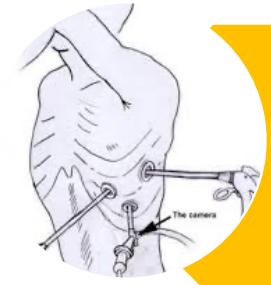
Estimated mortality



Lung cancer is the leading cause of death among Vietnamese males, and the second-most common cause for cancer-related fatalities among females

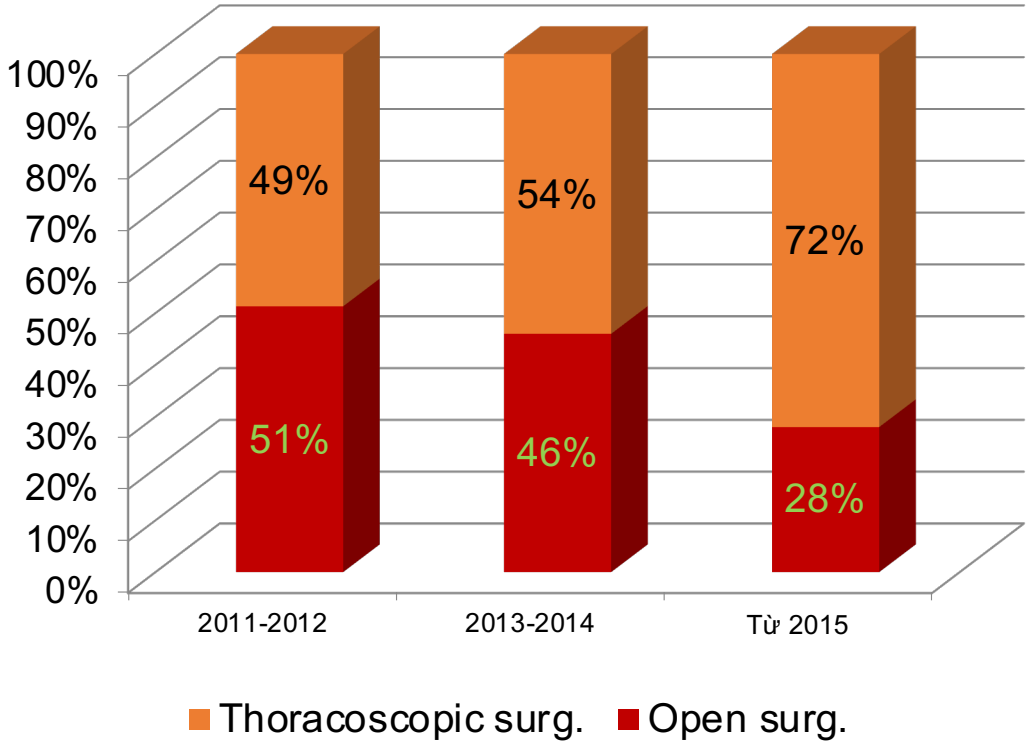
Bray F., Ferlay J., Soerjomataram I., et al. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: a cancer journal for clinicians; 68(6):394-424.

Overview



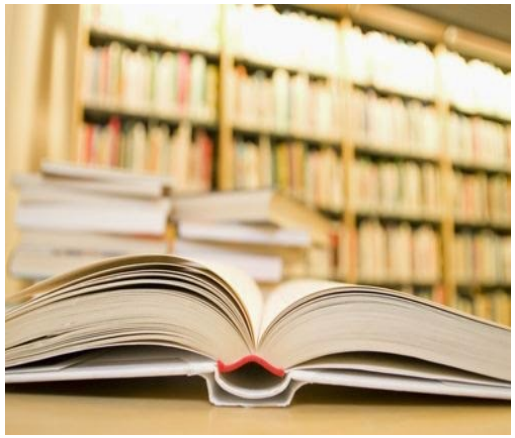
The trend is to reduce the level of intervention

Vietnam
2007 - 2008



Kent, Shah (2014), Adaichi (2017), Han (2018)

Overview



Situation of research

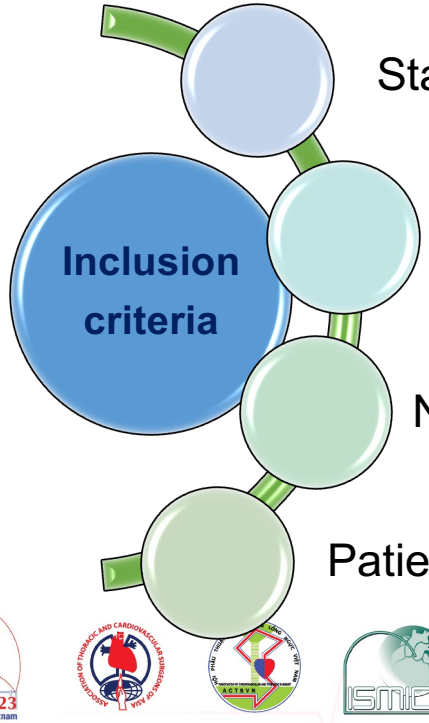
Aim

- Technical performance ability, lymph node dissection ability.
- Assesment of early results.

Describe the characteristics of recurrence in patients with NSCLC after thoracoscopic lobectomy and lymph node dissection

Material and Method

98 NSCLC patients (stage I, II) were indicated thoracoscopic lobectomy and lymph node dissection at 108 Military central hospital from 2017, May to 2021, March.



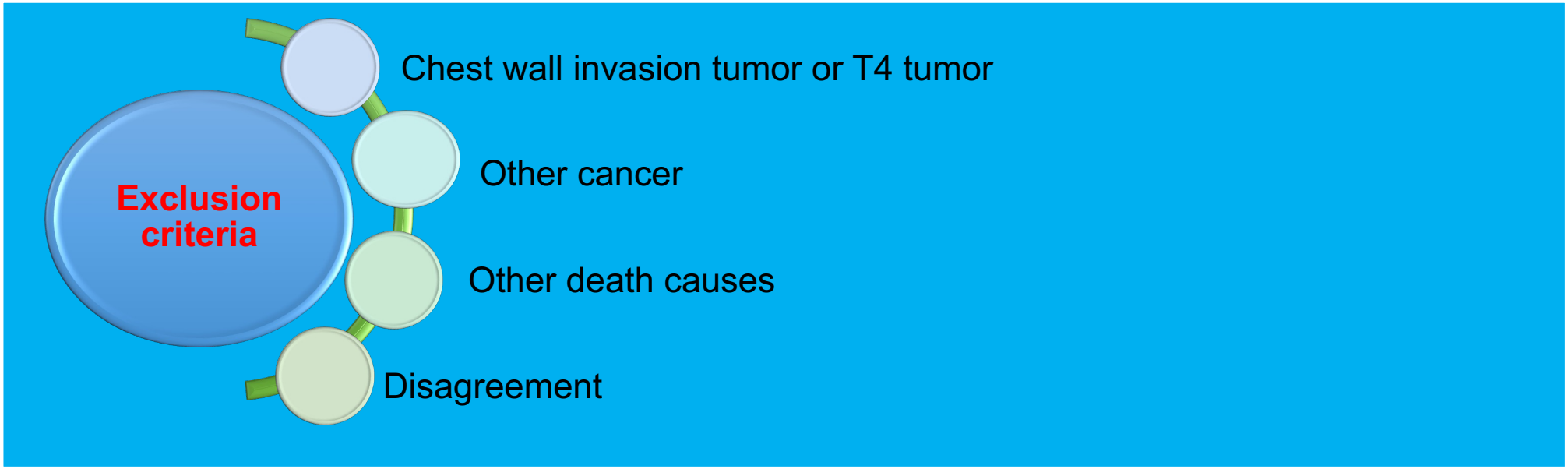
Stage I, II: histopathological result was NSCLC

Peripheral tumor with diameter ≤ 7cm

No pre – chemotherapy/radiation therapy

Patients with high agreements

Material and Method

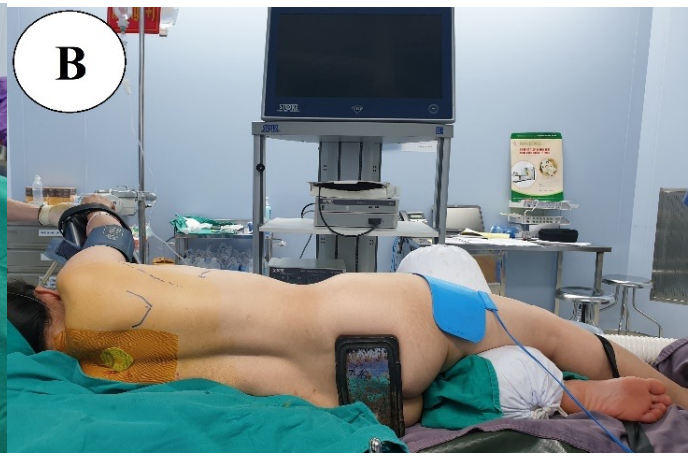


Material and Method

Surgical protocol*:*

Bronchial endoscopy

Patient Controlled Epidural Analgesia



Patient position

Material and Method

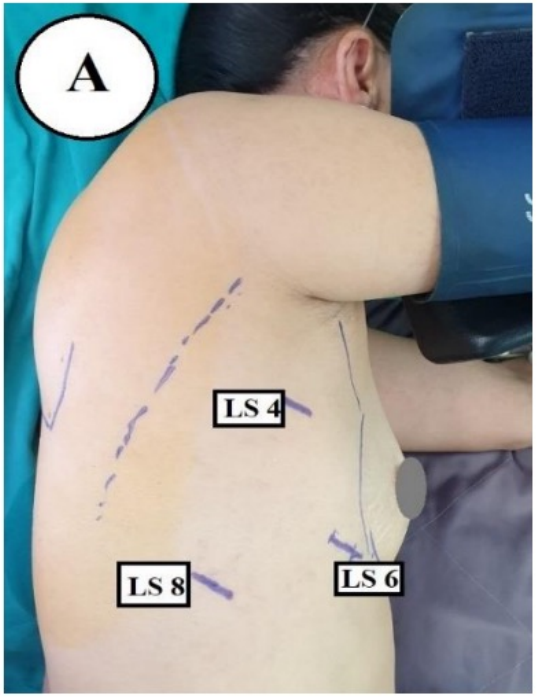
Surgical protocol

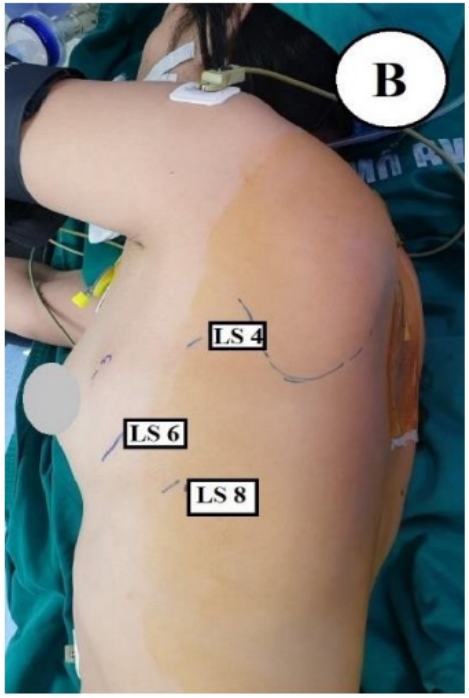
Step 1: make incision

Step 2: lesion assessment

Step 3: lobectomy and lymph node dissection

Step 4: closure





A: right side (Pt. Nguyen Thi T., ID 21072185)
B: left side (Pt. Duong Thi H., ID 19840051)

Material and Method

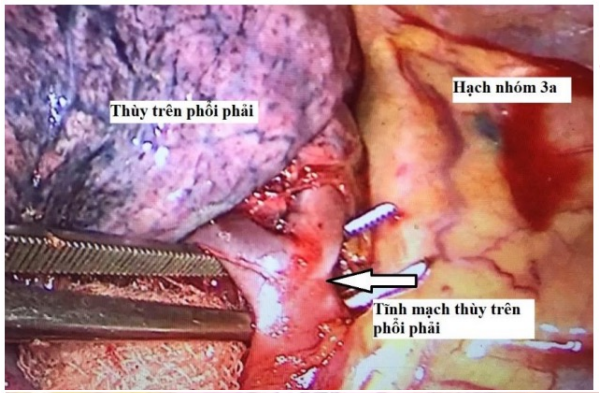
Surgical protocol

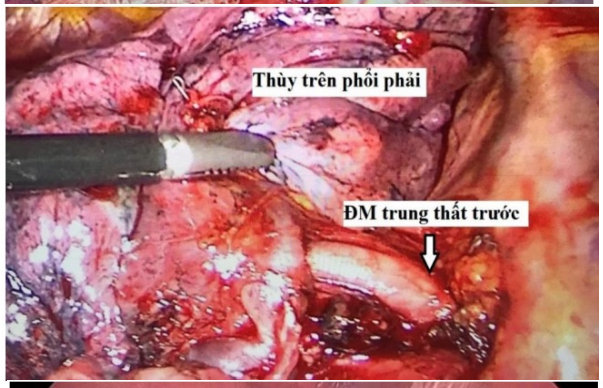
Step 1: make incision

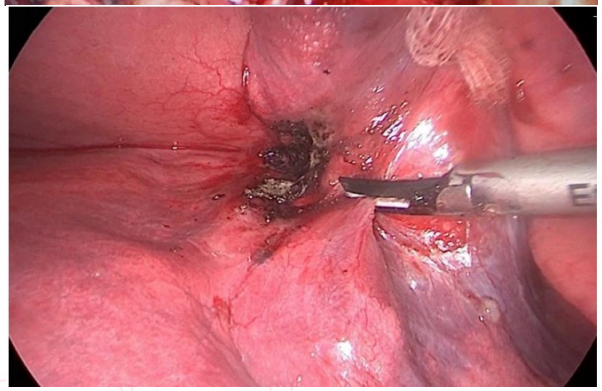
Step 2: lesion assessment

Step 3: lobectomy and lymph node dissection

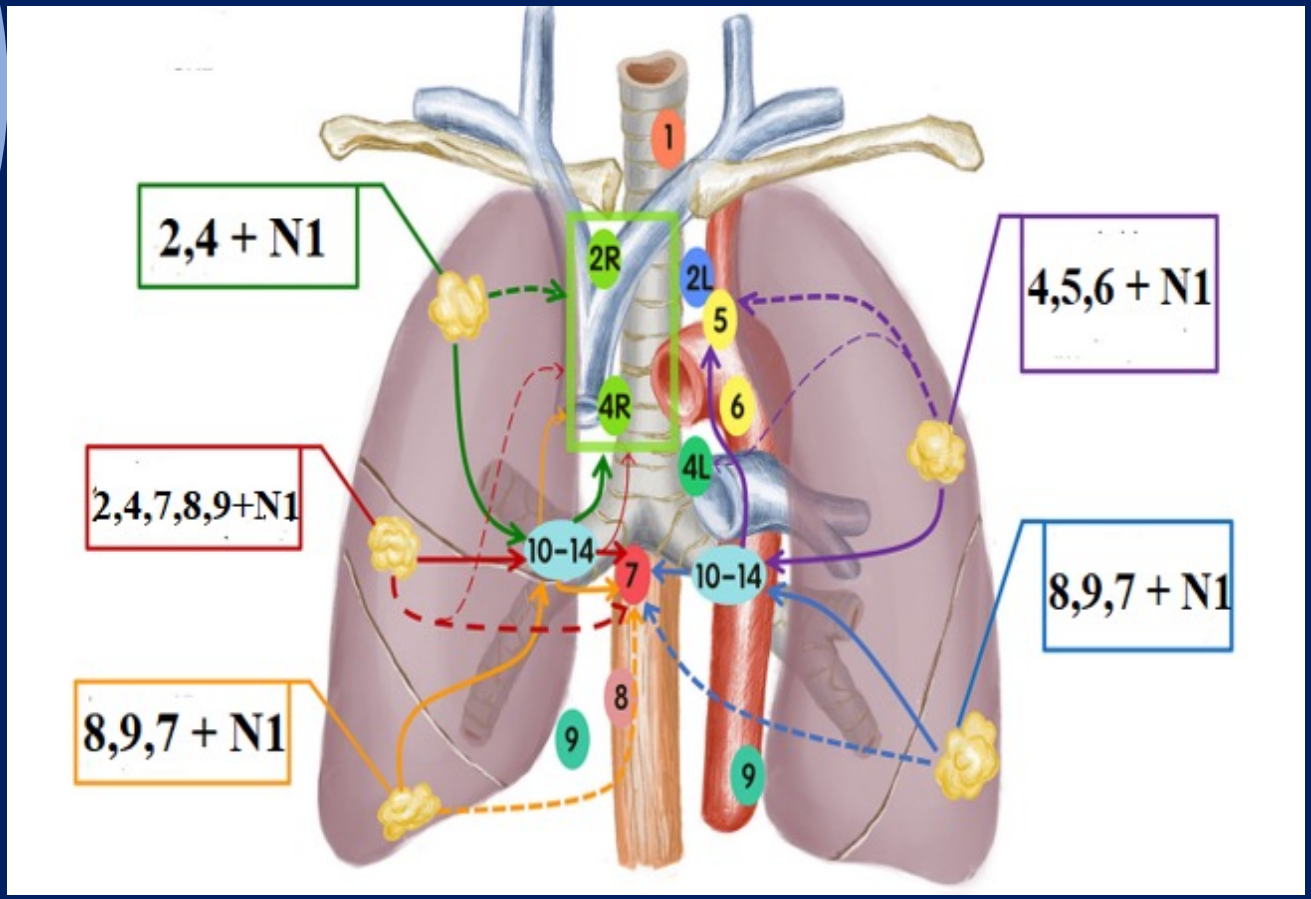
Step 4: closure







Lymph node dissection



Adachi H., Sakamaki K., Nishii T., et al. (2017). Lobe-specific lymph node dissection as a standard procedure in surgery for non–small cell lung cancer: a propensity score matching study. Journal of Thoracic Oncology;12(1):85-93.

Material and Method

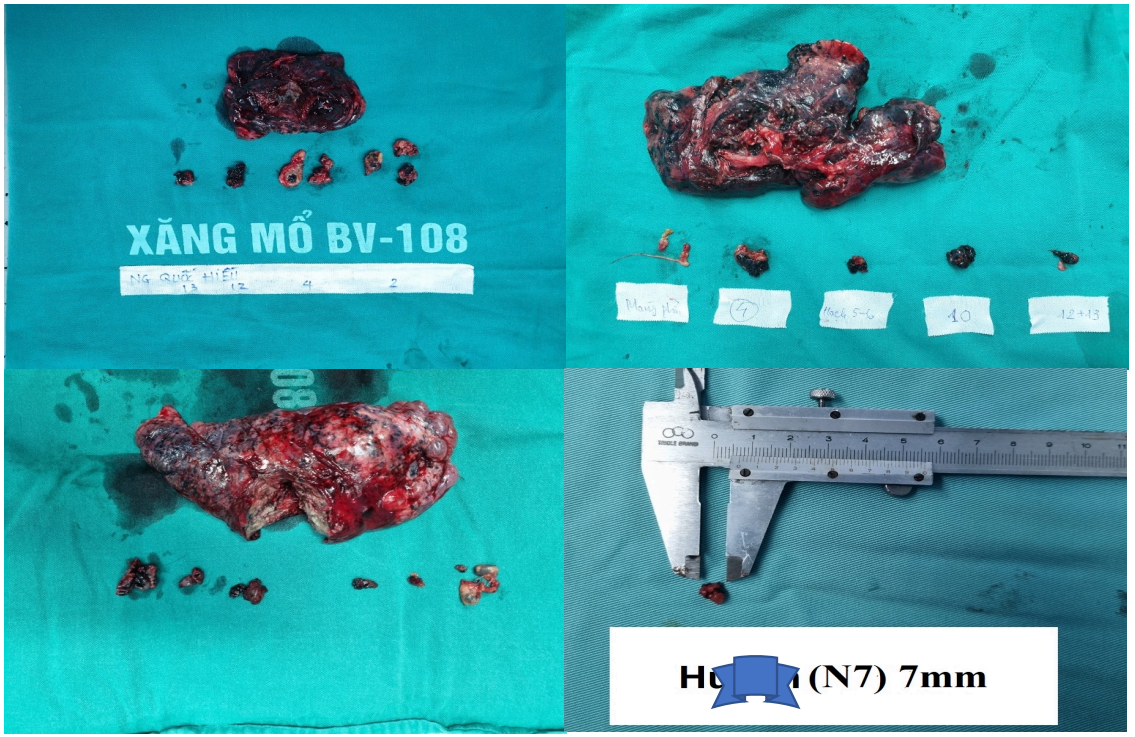
Surgical protocol

Step 1: make incision

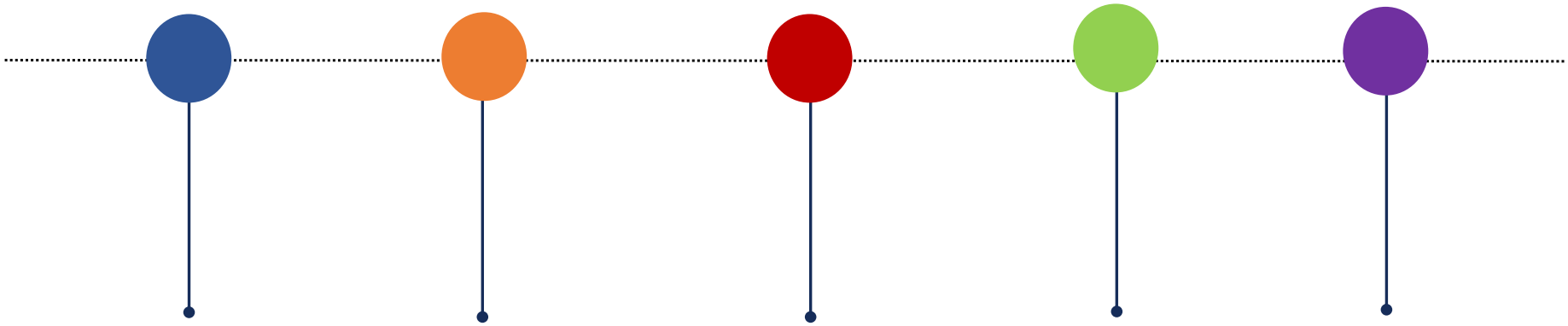
Step 2: lesion assessment

Step 3: lobectomy and lymph node dissection

Step 4: closure



Indicators


Recurrent rate
Recurrent position
Tumor size
Lymph node metastasis position
Number of lymph node/station metastasis

Relationship

Recurrences

- Lymph node metastasis
- Tumor characteristics

Recurrences

Recurrent status	n	%
12 months	19	19.4
24 months	29	29.6
36 months	31	31.6
48 months	34	34.7
Sum	34	34.7

Boyd et al (2010): recurrent rate 39%

Recurrent position

Recurrent position		Recurrence (n = 34)		Total (n = 98)	
		n	%	n	%
Recurrence	Lymph node	5	14.7	5	5.1
	Lung	2	5.9	2	2.0
	Brain	6	17.6	6	6.1
	Bone	2	5.9	2	2.0
	Liver	1	2.9	1	1.0
	Multi-position	**18**	**52.9**	18	18.4
	Sum	34	100	**34**	**34.7**
Non-recurrence				64	65.3

Tran Minh Bao Luan, Nguyen Van Loi: high rate of multiple position recurrences 23.8 – 95.4%

Recurrences and number of LN metastasis

Recurrent characteristics		Number of LN metastasis			Total	p
		0 LN	1 LN	≥ 2 LNs		
Non-recurrence	n	51	5	8	64	< 0.003
	%	75.0	62.5	36.4	65.3	
Recurrences	n	17	3	14	34	
	%	**25.0**	**37.5**	**63.6**	34.7	
Sum	n	68	8	22	98	
	%	69.4	8.2	22.4	100.0	

Recurrences and number of station metastasis

Recurrent characteristics		Number of station metastasis			Total	p
		0 station	1 station	≥ 2 stations		
Non-recurrences	n	51	7	6	64	<0.02
	%	75.0	50.0	37.5	65.3	
Recurrences	n	17	7	10	34	
	%	**25.0**	**50.0**	**62.5**	**34.7**	
Sum	n	68	14	16	98	
	%	69.4	14.3	16.3	100.0	

Recurrences and tumor size

Recurrent characteristics		Tumor size			Total	p
		≤ 3cm	3 – 5cm	> 5-7cm		
Non-recurrences	n	48	13	3	64	<0.05
	%	76.2%	48.1%	37.5%	65.3%	
Recurrences	n	15	14	5	34	
	%	**23.8%**	**51.9%**	**62.5%**	**34.7%**	
Sum	n	63	27	8	98	
	%	64.3	27.6	8.2	100.0%	

Bui Chi Viet. Surgery for primary non-small cell lung cancer . Ho Chi Minh city: Cancer, Ho Chi Minh City Medicine and Pharmacy University; 2011.

Marty-Ané C-H, Canaud L, Solovei L, Alric P, Berthet J-PJIc, surgery t. Video-assisted thoracoscopic lobectomy: an unavoidable trend? A retrospective single-institution series of 410 cases. 2013;17(1):36-43.

Recurrences and histopathological type

Recurrent characteristics		Histopathological type		Total	p
		Adenocarcinoma	Non-adenocarcinoma		
Non-recurrences	n	60	4	64	0.09
	%	68.2	40.0	65.3	
Recurrences	n	28	6	34	
	%	**31.8**	**60.0**	34.7	
Sum	n	88	10	98	
	%	89.8	10.2	100.0	

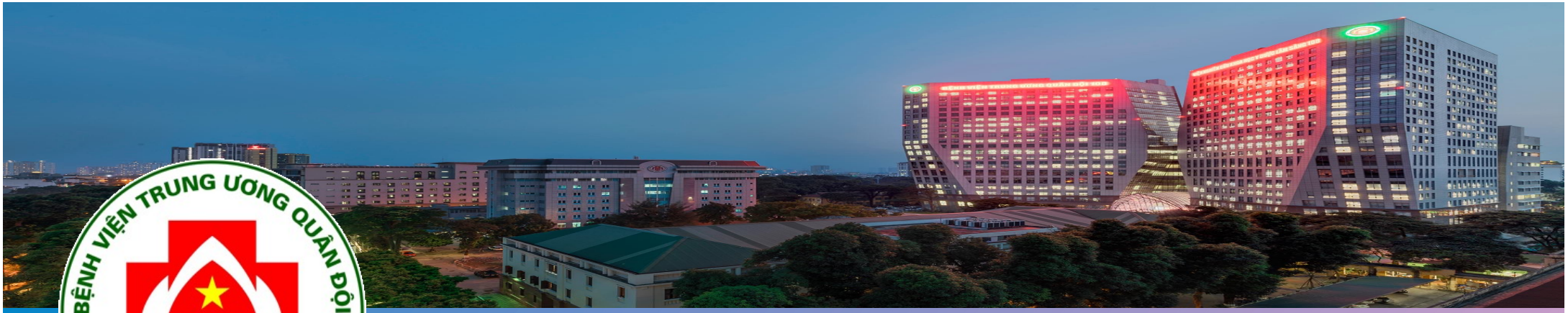
Recurrences and LN metastasis station

Recurrent characteristics		LN metastasis station				Total	p
		(-)	N1	Skip-N2	Non-skip N2		
Non-recurrences	n	51	5	5	3	64	<0.008
	%	75.0	50.0	55.6	27.3	65.3	
Recurrences	n	17	5	4	8	34	
	%	**25.0**	**50.0**	**44.4**	**72.7**	34.7	
Sum	n	68	10	9	11	98	
	%	69.4	10.2	9.2	11.2	100.0	

CONCULUSION

1. Rate of recurrence was 34.7% (34/98 patients), the majority of them was multi-position recurrence (52.9%)

2. The rate of recurrence was related to the number of metastatic lymph nodes, number of metastatic lymph node station, and tumor size.



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MILITARY CENTRAL HOSPITAL

Thank you for your attention