

Major Lung Resections for Non-Small Cell Lung Cancer in the Elderly – Age is a Barrier

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Objectives:

An increasing percentage of patients presenting with lung cancer are of an advanced age. Peri-operative complications are associated with older age. The World Health Organisation considers older patients as >65 years, however for the purpose of this study we analysed the results of lung resections in patients >75 years. We compared them to patient’s conventionally deemed older (65 – 75 years) and younger patients (< 65 years). We paid attention to 90-day mortality in view of the recent recognition in the literature of the significant numbers of patients dying between 30 and 90 days.

Methods:

We conducted a retrospective review of a prospectively collected dataset on all patients who underwent anatomical resection for non-small cell lung cancer in our unit between January 2010 and October 2015. Clinical records were reviewed for data regarding patient demographics, pre-operative clinical stage, surgical procedure, final pathological stage, and outcomes (30-day and 90-day mortality). For the purpose of this study, we defined a very elderly patient as 75 years of age or older, an elderly patient as 65 to 74 years, and young patients < 65 years old.

Results:

Mortality	Patients ≥ 75 years			Patients 65 – 74 years			Patients ≤ 64 years		
	n =	30-day %	90-day %	n =	30-day %	90-day %	n =	30-day %	90-day %
Lobectomy / Bilobectomy	141	6.4	2.8	311	4.2	4.2	298	2.35	1.3
Sleeve lobectomy / bilobectomy	10	0	0	26	7.7	3.8	32	3.1	0
Pneumonectomy / Sleeve pneumonectomy	10	20	0	42	11.9	4.8	52	3.8	1.9

970 patients underwent anatomical resection for non-small cell lung cancer. There were 171 very elderly patients identified.

Conclusion:

In our series, 18% of the patients are over 75 years with a further 42% of patients aged 65 – 74 years. There is a definite increase in operative mortality with age both at 30 and 90 days. Mortality for lobectomy >75 years is two to three times that of under 64's. Although numbers are small, mortality for pneumonectomy in patients > 75 is particularly high. Despite this we feel that patients should not be denied curative lung resection on the basis of age alone but every effort should be made to avoid pneumonectomy.