Survival in lung cancer patients with pathologic fracture
Kovi, Hirsh1 Wedin, Rikard2
1 Karolinska University Hospital, Solna, Stockholm, Sweden 2 Dept
of Orthopaedics, Karolinska University Hospital-Solna, Stockholm,
Sweden
Background: About 30–40% of all lung cancer patients will develop
bone metastases during the course of their disease and skeletal related
events like pain, pathologic fractures and paraparesis are common.
These complications often occur during the last months of life; how-
ever, some patients will live for years. The aim of the study was to
identify factors associated with survival.
Material and Methods: This retrospective study was based on a
consecutive series of 100 patients with lung cancer treated surgically
for metastatic lesions of long bones or due to vertebral fracture and
paraparesis from 1986 through 2006. There were 45 men and 55
women with a median age of 60 and 63 years respectively. 68 patients
were surgically treated for a long bone fracture and 32 patients due
to paraparesis. Of the patients operated for a long bone fracture, 73
had a complete fracture whereas 33 were treated for an impending
fracture. Adenocarcinoma was diagnosed in 60 patients, squamous cell
carcinoma in 15, low differentiated non-small cell cancer in 11, SCLC
in large cell carcinoma in 8, bronchoalveolar carcinoma 1 and large
cell carcinoma in 5. 89% of male patients and 86% of the females were
smokers or former smokers.
Results: The Kaplan-Meier survival rate for the series of 100 patients
was 0.19 at 1 year after surgery, 0.07 at 2 years and 0.04 after 3 years.
The median survival was 319 days for patients with adenocarcinoma,
253 days for patients with SCLC and 244 days for squamous cell carci-
noma (p<0.014). 33% of the patients had skeletal metastasis as the first
sign of disease. Their survival was significantly shorter than patients
with bone metastasis diagnosed as a secondary event, 94 vs 319 days
(P<0.049). Patients treated for a long bone fracture had a significantly
longer survival than patients operated due to paraparesis 316 vs 207
days (p<0.038). There was a tendency to shorter survival in patients
with complete as opposed to impending fractures (p<0.07).
Conclusion: The one year survival rate 0.19 implicates that palliative
surgery is justified in patients with skeletal metastasis of lung cancer.
However, patients with skeletal metastasis as the first sign of disease
and patients surgically treated for paraparesis were associated with
poor prognosis.

The clinical experiences of double sleeve lobectomy of the bronchus
and the pulmonary artery
Kuang, Yukang; Zeng, Laiduo; Wu, Jiufa
Department of Thoracic Surgery, JiangXi Tumor Hospital, Nanchang,
China
Objective: Investigate the methods and the results of double sleeve lo-
becotomy of the bronchus and the pulmonary artery in surgical treatment
for the central lung cancer.
Methods: From March 1995 to March 2006, double sleeve resection
and reconstruction of bronchus and pulmonary artery was performed in
12 cases with central lung cancer. Among them, double sleeve left up-
per lobectomy in 10 cases, double sleeve right upper-middle lobectomy
in 2 cases.
Results: Occurring irregular heartbeat after operation in 2 cases, the
obstruction pneumonia and pulmonary atelectasis in 1 case. The squa-
rous cell carcinoma in 9 cases, adenocarcinoma in 2 cases, SCLC in 1
case. No surgical operation death. The 1,3 and 5 year survival rate was
81.9% (9/11), 100% (7/7) and 100% (5/5) respectively.
Conclusion: The double sleeve lobectomy of bronchus and pulmonary
artery maximally reserving the healthy lung and maximally cutting off
the tumor at the same time, avoiding pneumonectomy. The postopera-
tive living quality of patients is well.

Tumor size and 5-year survival rate in surgically treated patients
with pN0M0 NSCLC
Kupis, Wlodzimierz R.1 Rudzinski, Piotr M.1 Orłowski, Tadeusz M.2
1 National Institute of Tuberculosis and Lung Diseases, Warsaw, Poland
2 National Institute of Tuberculosis and Lung Cancer, Warsaw, Poland
Background: In present TNM system the border line between T1 and
T2 is 3cm of diameter in tumor size. We tried to estimate the influence
of tumor size on the 5-year survival rate in MSCLC patients operated
on with pN0M0.
Method: We have analyzed retrospectively the group of 328 patients
with pN0 NSCLC operated on in our institution between year 1998 and
2000. The time of follow-up was 5 to 8 years.
We divided our pts into 7 groups considering the tumor size criteria
(<1cm, 1-2cm, 2-3cm, 3-5cm, 5-7cm, 7-10cm, > 10cm).
Results: The histology of resected tumors was adenocarcinoma in 108
(38%), squamous in 154 (47%), NSCLC in 10 (3.1%), large cell In 9
(2.7%), carcinoid in 22 (6.7%), other in 8 (2.4%). The type of resection
included pneumonectomy in 56 pts, lobectomy in 263 pts and wedge
resection/segmentectomy in 8 pts.
The number of pts incorporated in tumor size group was 10, 50 76,
100, 47 26 and 9 pts in 1cm group, 1-2cm group, 2-3cm, 3-5cm, 5-7cm, 7-0cm, > 10cm.
Results: The histology of resected tumors was adenocarcinoma in 108
(38%), squamous in 154 (47%), NSCLC in 10 (3.1%), large cell In 9
(2.7%), carcinoid in 22 (6.7%), other in 8 (2.4%). The type of resection
included pneumonectomy in 56 pts, lobectomy in 263 pts and wedge
resection/segmentectomy in 8 pts.
Conclusions: We have found no statistically significant deference
between first three groups of patients. Therefore we concluded that the
5cm border line in tumor size might be prognostic in terms of 5-year
survival rate in NSCLC patients undergoing radical resection of lung
tissue.