showed improved safety and higher accuracy. Our results indicate that intraoperative US may have important staging implication.

PDS-3-2
NSCLC-Surgery, Thu, 12:30 - 14:15
Prognostic value of the number of examined lymph nodes in totally resected Non-Small-Cell Lung Cancer
Douillard, Jean-Yves1 Frenel, Jean-Sebastien2 Campion, Loic3 Sagan, Christine1 Michaud, Jean-Luc4 Despins, Philippe1 Perigaud, Christian1 Mugniot, Antoine1 Cellerin, Laurent1
1 Medical Oncology Centre R Gauducheau, Saint-Herblain, France 2 Centre R Gauducheau, Saint-Herblain, France 3 R and G Lanneec Hospital CHU Nantes, Saint-Herblain, France 4 Clinique St-Augustin, Nantes, France

Background: Surgery is the gold standard for cure in resectable Non-Small-Cell Lung Cancer (NSCLC). Pneumonectomy and lobectomy are performed along with mediastinal lymph node dissection to allow pTNM staging. In other tumor types including colon and gastric cancer, it has been demonstrated that the number of examined lymph nodes is an independent prognostic factor of survival, whatever the lymph node involvement. We retrospectively analyzed 218 patients with a totally resected NSCLC and looked at the prognostic value of the number of lymph nodes examined on the resected specimen.

Methods: Consecutive cases from 01/2001 to 12/2004 included 81% men, median age 61, Squamous histology 50%, Adenocarcinoma 39%. There were 44% pTNM stage I, 29% stage II and 27% stage III, (54% pN0, 30% pN1 and 16% pN2), median follow-up 38 months. Surgery consisted in pneumonectomy (33%), lobectomy or bilobectomy (67%). Only 18 patients (8.6%) received adjuvant chemotherapy.

Results: The median number of lymph nodes examined was 7 (1-48) (pneumonectomy, median of examined lymph nodes 10, lobectomy/bilobectomy, 6 examined lymph nodes). Three groups were defined according to the number of examined lymph nodes to assess a possible prognostic value: 0-4 (group 1), 5-8 (group 2), 9 or more(group 3). In the overall population, no difference was seen among the three groups on Relapse-Free Survival (RFS, p=0.48), Lung cancer Specific Survival (LCSS, p=0.44) and Overall Survival (OS, P=0.63). In stage pN1, the number of examined lymph nodes if less than 5 had a significant impact on RFS (p=0.0003), on OS (p=0.014), and on LCSS (p=0.028). No difference was seen in stage pN0 and pN2.

Conclusion: A minimum of 5 lymph nodes should be recommended for pathologic examination to provide proper staging in stage pN1.

PDS-3-3
NSCLC-Surgery, Thu, 12:30 - 14:15
Time course of the stimulating effect of serum on lung cancer cell proliferation after lung resection
Yoshimasu, Tatsuya1 Oura, Shoji; Tamaki, Takeshi; Ota, Fuminori; Nakamura, Rie; Shimizu, Yukio; Hirai, Yoshimitsu; Naito, Koma; Kiyoi, Megumi; Okamura, Yoshitaka
Department of Thoracic and Cardiovascular Surgery, Wakayama Medical University, Wakayama, Japan

Purpose: Operative stress can alter the blood levels of various physiologically active substances (cytokines, growth factors, etc.), and thus potentially affect cancer cell proliferation. How the combination of changes in blood levels of these substances affects cancer cells has not been adequate addressed. In an in vitro study we previously reported that human serum obtained immediately after lung resection surgery stimulated lung cancer cell proliferation compared to that obtained before surgery. Here we investigated the time course of the stimulation capacity of serum for cancer cell proliferation in the early postoperative period.

Methods: The subjects were 10 patients undergoing lung cancer surgery. Blood was sampled from each subject immediately before surgery and immediately, one day, one week, and two weeks after surgery. Serum derived from each blood sample was frozen and stored. EBC-1, a human NSCLC culture cell line, was used for the study. Cells were exposed to serum (collected at varying points of time before and after surgery) at a concentration of 10% for 48 hours. MTT assay was conducted thereafter to evaluate cell proliferation, with absorbance (O.D.) measured at 540 nm (control: 630 nm) using a microplate reader. The percent stimulation of cell proliferation with postoperative serum compared with control (preoperative) serum was calculated using the formula 100 x (postoperative O.D. - preoperative O.D.)/preoperative O.D.

Results: Serum collected at each time point (immediately, one day, one week, and two weeks) after surgery significantly stimulated the proliferation of EBC-1 compared to preoperative serum. Serum collected immediately after surgery showed the highest percent stimulation of cell proliferation, and this effect tended to decrease gradually with time after surgery. However, even serum collected two weeks after surgery still significantly stimulated cell proliferation compared to preoperative serum.

PDS-3-4
NSCLC-Surgery, Thu, 12:30 - 14:15
The impact of multiplicity of metastatic nodal stations on survival in surgically resected non-small cell lung cancer patients: Is N2 disease really different from N1 disease?
Kang, Chang Hyun; Kim, Young Tae; Jeon, Snag-Hoon; Sung, Sook-Whan; Kim, Joo Hyun
Department of Thoracic and Cardiovascular Surgery, Seoul National University Hospital, Seoul National University College of Medicine, Seoul, Korea

Background: The aim of the study was to identify the common factors which affect survival of surgically resected non-small cell lung cancer (NSCLC) patients with N1 and N2 disease.

Methods: A retrospective review was performed in NSCLC patients who underwent primary surgical resection from Jan 2000 to Sep 2006. The inclusion criteria were patients with 1) pathologically confirmed N1 and N2 disease, 2) pathologic T1 to T3 disease, 3) no history of neoadjuvant chemotherapy, and 4) complete mediastinal lymphadenectomy. During the study period 468 NSCLC patients with nodal metastasis were operated on in our hospital. According the selection criteria, 281 patients (60.0%) were included in the study. There were 132 patients with N1 disease (N1 group) and 149 patients with N2 disease (N2 group). The median follow-up period was 22 months (1-81 months) and complete follow-up was possible in 269 patients (95.7%).

Results: Lobectomy was performed in 195 patients (69.4%), bilobectomy in 43 (15.3%) and pneumonectomy in 43 (15.3%). Complete resection was possible in 274 patients (97.5%) and operative mortality