Poster Sessions

Lung cancer

149 POSTER

Female-male differences in lung cancer patients

E. Radzikowska, K. Roszkowski, P. Glaz. *National Tuberculosis and Lung Diseases Research Institute, Warsaw, Poland*

Purpose: The community based cancer registry was set up and results were analysed to assess differences in clinicopathological parameters and survival between women and men.

Patients and methods: The Pulmonary Outpatients Departments supplied data on 20561 lung cancer patients diagnosed in Poland in 1995 to1998. Data regarding demographic, smoking, histology, performance, clinical stage of the disease, treatment and survival were obtained.

Results: There were 2875 women and 17686 men with lung cancer. Women were younger than men (59,1 vs.61,9 years; p<0,001). Patients below 50 years of age were more frequently noticed among women then men (23,3% vs.12,6%; p.<0,001). Women with small cell lung cancer and adenocarcinoma were significantly younger than women with squamous cancer (58,2; 58,2 vs. 61 years: p.<0,05). Also men with adenocarcinoma were younger than men with squamous cancer (60,2 vs.62,3; p.< 0,05)

Squamous cancer was the predominant type of lung cancer both among women(32,5%) and men(55,2%). However small cell lung cancer (26,6% vs. 19,9%: p.<0,001) and adenocarcinoma (21,6% vs.9,6%: p.<0,001) were more frequently noticed among women than among men.

Non-smokers were more often observed among women than men (18,8% vs.2,4%; p.<0,001). Adenocarcinoma patients smoked less intensively than patients with squamous and small cell lung cancer both in women (18,7 pack/year vs. 25,8 and 26,4 pack/year; p.<0,001) and in men(32,6 pack/year vs. 36,8 and 35,9 pack/year; p<0,001).

In multivariate analysis male gender (Relative Risk - RR=1,13), nonsurgical treatment (RR=3,03), small cell histological type of lung cancer(RR 1,42), performance status 2 (RR=1,68) and 3+4 (RR=2,72) in ECOG scale, clinical stage of the disease 2(RR=1,38), 3(RR=1,84), 4(RR=2,72) were negative significant independent prognostic factors in lung cancer patients.

Conclusions: Lung cancer was 6 times more frequently noticed among men than among women. Women were younger than men and smoked less intensively. Adenocarcinoma and small cell lung cancer were more often observed among them. Women had a better prognosis than men.

150 POSTER

Malignant pleural mesothelioma: treatment with liposomized doxorubicine. A phase two Scandinavian study

G. Hillerdal[1], O. Brodin[2], A. Hjerpe[3], J.B. Sorensen[4], S. Sundström[5]. *Nordic mesothelioma group; [1]Karolinska hospital, Lung Department, Stockholm, Sweden; [2]Huddinge hospital, Department of Pathology, Stockholm, Sweden; [3]Academic hospital, Department of Oncology, Uppsala, Sweden; [4]Finsen Institute, Copenhagen, Denmark; [5]Regional hospital, Trondheim, Norway*

Malignant pleural mesothelioma is resistant to most cytostatics. Doxorubicine is one of the most active as a single drug, but its use is restricted by its serious side effects, particularly carditoxocity. Since a few years it has been available as liposomized drug, which could limit the toxicity but hopefully not the efficiency. The Nordic Mesothelioma Groups therefore decided to test the drug in a phase II non-randomized study.

Material: All patients with pathological diagnosis of malignant mesothelioma, all stages, performance status 0-2, were included after informed consent, from January, 1999 to December, 2000. Liposomized Doxorubicine (Caelyx®), 40 mg/m2, was given i.v. every fourth week in a dosage of mg/m2 for six cycles unless progression of disease, significant toxicity, or patient unwilling to continue. After 6 cycles, treatments could be continued if patient and doctor agreed to do so. CT scan was made initially, every third month until progression, and when PR or CR occurred, and were scrutinized by a radiological group. All pathological specimens were seen by the Swedish Mesothelioma Pathology Panel. The study was approved by the local ethical committees.

Results: 63 patients were included. Analysis so far is available for toxicity of 54 patients and preliminary figures are also available for PR and time to progression. Toxicity was low, and only three patients stopped treatment because of side effects (one anaphylactic chock at first treatment, one intense vomiting after five treatments, and one diarrhea grade III after two treatments). Hematological toxicity was almost not seen. The most common side effect was Palmo-Plantar Erythema, seen in 11 patients (20%), thereof 7 grade II but none more severe and not dose-limiting.

24 of 54 patients (44%) did not reach 6 treatments, thereof 21 (39%) due to tumor progression. Five patients received more than 6cyccles, one patient was treated for 18 cycles.

There were only 4 PR, but the impression is that there was a long time to progression. The median TTP for those who received 6 treatments or more was 217 days and the total median for the whole group was 180 days, but many data are not yet evaluated. Also, there remain a number of patients to be checked by the pathology panel and also by the radiology panel.

Conclusion: Liposomized Doxorubicine (Caelyx®) is very non-toxic and seems to increase the TTP in many patients with mesothelioma. It should be tested in combination with other drugs.

151 POSTER

Expression of tumor-associated antigen RCAS1 is significantly correlated with poor prognosis in non-small-cell lung cancer

M. Izumi, Y. Nakanishi, T. Minami, T. Harada, N. Inoshima, K. Kimotsuki, K. Inoue, H. Wataya, R. Ishibashi, N. Hara. *Graduate School of Medical Sciences Kyushu Univ., Research Institute for Diseases of the Chest, Fukuoka, Japan*

Purpose: RCAS1 is a recently discovered antigen molecule expressed on the membrane of cancer cells and acting as a ligand for a putative receptor present on such immune cells as T, B and NK cells. It has been suggested that RCAS1 expression is related to the escape of tumors from immune surveillance. In this study, the relationship between RCAS1 expression and various clinicopathological variables, including patient prognosis, was investigated in lung cancer using immunohistochemical analysis.

Methods: One-hundred-and-two surgically resected non-small-cell lung cancer cases were examined histopathologically using the monoclonal antibody 22-1-1, which is specific for RCAS1. The correlation between RCAS1 expression and the clinicopathologic features of the patients was evaluated. Moreover, the correlation between RCAS1 expression and the survival of patients was analyzed by the Kaplan-Meier method/Logrank test, and multivariate analysis was performed by using the Cox proportional hazard model.

Results: The samples of 48 of the 102 lung cancer patients (47.1%) were positive for RCAS1. There were significant correlation between RCAS1 expression and either pathological staging ($p = 0.0003$) or tumor differentiation ($p = 0.0308$). The survival time for the RCAS1-positive group was significantly shorter than that for RCAS1-negative group ($p < 0.0001$). Moreover, multivariate analysis for overall survival revealed that RCAS1 expression was a significantly independent prognostic factor in non-small-cell lung cancer patients.

Conclusion: These results suggested that RCAS1 expression may play an important role in immune escape mechanism, and may be a good indicator of poor prognosis in patients with non-small-cell lung cancer.