Pulmonary Function and Alcohol Consumption

To the Editor:

The possible pathogenetic effect of alcohol on lung function is subject to dispute, since the studies of their relationship (mostly including alcoholics or heavy drinkers) have provided inconsistent results. In most epidemiologic studies, alcohol consumption was assessed from answers to questionnaires, and was likely to be underreported. In a study of 335 healthy working men aged 35 to 50, we measured blood gamma-glutamyl transpeptidase (GGT) levels, which are considered to be positively correlated with alcohol consumption in people without liver disorders. This study was conducted in the medical center of the western Paris sector of French Railroads (people come to such centers to undergo the annual medical examination which is compulsory for wage earners in France). Pulmonary function was measured with a dry spirometer (Vicatest 4). The best of three acceptable measurements was chosen according to the ATS criteria. Besides forced expiratory volume in 1 s (FEV1) and forced vital capacity (FVC), the forced expiratory flow rate after expiring 25, 50, and 75 percent of FVC (Vmax25, Vmax50, and Vmax75) were recorded. Function values were adjusted for age and height by constructing "standard" variables with zero means and unit variances, calculated as follows: multiple regression analyses provided multiple regression equations; for each subject predicted values were calculated from these equations and the differences between the observed and predicted values were divided by the square root of the residual variance of regression. The correlations between these standard variables and GGT levels were statistically significant for FEV1, FVC and Vmax75, although the R values were small (−0.15, −0.17 and −0.13, respectively).

The study population was divided into two groups, in case the regression was not linear. The first group contained the 244 men with less than 40 IU/L GGT, and the second contained the 91 men with 40 IU/L or more. Figure 1 shows that the mean values of the "standard" variables were lower for those with 40 IU/L or more. These results cannot be explained by smoking habits, since the proportion of subjects with 40 IU/L GGT or more was the same in nonsmokers, current smokers and ex-smokers (26.8, 27.7, and 26.9 percent, respectively [NS]). Thus, a study of pulmonary function in a population of working men showed relationships between a biologic marker of alcohol consumption and lung function impairment.

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![Figure 1. Age-and-height-adjusted pulmonary function values (standard variables) according to GGT.](image-url)
Primary Non-Hodgkin's Lymphoma of the Larynx Treated Only by Chemotherapy

To the Editor:

Non-Hodgkin's lymphoma isolated to the larynx (stage IE), is a rare extranodal localization of the disease, with only 23 cases previously reported in the literature. Despite the unfavorable histologic condition of many of these lymphomas, radiotherapy appears to be the treatment of choice, with excellent response and prognosis. Only one patient was treated by combination radiotherapy and chemotherapy.

An additional case of primary non-Hodgkin's lymphoma of the larynx is reported here, treated successfully by chemotherapy alone. Chemotherapy reflects the current approach to treating localized aggressive lymphomas.

A 54-year-old man presented in 1983 for evaluation of a left subglottic mass, 0.5 in diameter. There was a six-month history of sore throat-like symptoms and hoarseness, gradually becoming worse. Histologically, it was found to be a diffuse, small, cleaved lymphoma. Staging investigations (including CT scan of the thorax and upper and lower abdomen, and a bone marrow biopsy) showed no evidence of disease outside of the larynx. The patient denied radiotherapy. He was treated with six cycles of combination chemotherapy with cyclophosphamide, doxorubicin, vincristine and prednisone. The patient at follow up remains alive and disease-free so far.

We suggest that combination chemotherapy is an efficient alternative to radiotherapy for isolated lymphoma of the larynx in cases where the latter is not feasible.

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Regression of Primary Pulmonary Hypertension

To the Editor:

Primary (unexplained) pulmonary hypertension has generally been regarded as a progressive disease which is rapidly fatal. As a result, these patients may be managed in a highly aggressive way. Nevertheless, a significant subpopulation of cases has been indicated to have a substantially better prognosis; in some cases, like the following one, there may be complete regression of pulmonary hypertension.

A 36-year-old woman was admitted to the hospital because of increasing dyspnea and syncopal attacks on effort. Symptoms had begun after her first delivery six months before admission. Past clinical history was uneventful; she was normotensive, there was no evidence of primary lung disease, valvular heart disease or connective tissue disease; she did not smoke, nor had taken any drugs before. Pregnancy and delivery had been completely normal.

Physical examination revealed only a loud second sound in the pulmonary area. Brachial pressure was 130/80 mm Hg. ECG was normal and there was a moderate bulging of the pulmonary artery visible on chest roentgenogram. Right heart catheterization showed the following pressures (mm Hg): right atrium 2 (mean), right ventricle 65/0; pulmonary artery 63/25 (mean 38), capillary wedge 8 (mean). Cardiac index was 3.2 l/m²/mg; pulmonary vascular resistance 753 din·sec·m⁻⁵·kg⁻¹. Angiopneumography showed no filling defect in the pulmonary circulation, either on the arterial or venous side, left atrium and left ventricles were normal. After angioplasty pulmonary arterial pressure raised to 85/44 mm Hg (mean 60).

The patient was discharged on drug therapy consisting of xantinol nicotinate (150 mg × 3) and a mixture of mesoglicans isolated from veal aorta (Prisma, Mediolanum Co, Italy, 12.5 mg × 2) for four months. Symptoms gradually disappeared within the following year. At the age of 40 years she was well and the right heart pressures (mm Hg) were: right atrium 4/0, right ventricle 32/0, pulmonary artery 32/11, capillary 6 (mean). At the age of 48 years she was in a perfect health.

Pulmonary hypertension may be considered unexplained in our case, although microemboli from the pelvic veins after pregnancy cannot be excluded. Whatever the underlying mechanism, this case stresses once again the difficulties in evaluating the clinical course and treatment of patients with primary (unexplained) pulmonary hypertension.

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CHEST / 98 / 6 / DECEMBER, 1990 1547