FEV1 AS A PROGNOSTIC FACTOR FOR SURVIVAL IN STAGE III NSCLC PATIENTS TREATED WITH CHEMORADIATION: MULTIVARIATE ANALYSIS OF CHERNOS TRIAL

Paul Germonpre, PhD*; Annelies Janssens, MD; Lut Van Moorter, MD; Dirk Verresen, MD; Danny Galdermans, MD; Roger Devogelaere, MD; Hugo Ottevaere, MD; Yves Mentens, MD; Christel De Pooter, PhD; Chris Goor, MD
Author and Funding Information
Antwerp University Hospital, Edegem, Belgium

CHEST. October 2008;134(4_MeetingAbstracts):p45004-p45004.
Published online
Article

Abstract

PURPOSE: Data from the recent HOG 01–24 trial suggest that survival of stage III NSCLC patients (pts) treated with chemoradiotherapy (CRT) is correlated with the FEV1. In this multivariate analysis we evaluated the prognostic value of FEV1 and/or DLCO in pts treated with CRT in the Chernos trial.

METHODS: Patients (PS 0–2) with unresectable stage III NSCLC were treated with 3 cycles of induction chemotherapy (carboplatin AUC 5 on d1 and gemcitabine 1200 mg/m2 on d1 and d8 Q3 wks) followed by conventional radiotherapy (2.0 Gy/fraction, 5 fractions a week, up to a total dose of 60 Gy) with concurrent weekly cisplatin (30 mg/m2). The primary endpoint was overall survival at 2 years. In an exploratory analysis the effect of FEV1 and/or DLCO on survival was investigated.

RESULTS: Between 02/2003 and 11/2005, 45 pts were enrolled. The demographics were as follows: 76%/24% male/female, median age 62 y (range 41–81 y), 73%/27% performance status (PS) 0–1/2, 26%/74% FEV1 ≥70%/<70%, 76%/24% cN0–2/cN3 disease, 42%/58% squamous/non-squamous. No treatment-related deaths were observed. The median progression free (PFS) and overall survival (OS) are 11.1 m and 20.4 m. The 1-, 2- and 3-yr OS rates are 62%, 38% and 17%. In univariate analysis there was a favourable association for PFS with cN0–2 (p .07), DLCO ≥55% (p .02), and for both PFS and OS with FEV1 ≥70% (HR .22; p <.01 and HR .37; p< .01 resp.). There was no survival difference according to gender, histology and PS. In multivariate analysis, only FEV1 ≥70% was independently associated with better PFS and OS.

CONCLUSION: In our series of pts with unresectable stage III NSCLC treated with CRT FEV1 ≥70% is an independent favourable prognostic factor.

CLINICAL IMPLICATIONS: Our data confirm the prognostic value of FEV1 in pts with stage III NSCLC, indicating that FEV1 is an important factor when interpreting results from different CRT trials, when selecting CRT treatment for individual pts or when designing new trials comparing different CRT regimens.

DISCLOSURE: Paul Germonpre, No Financial Disclosure Information; No Product/Research Disclosure Information
Tuesday, October 28, 2008