

ORAL PRESENTATION

Open Access

Surgical treatment for bronchial carcinoid tumors prognostic factors for long-term outcome

D Petrov^{1*}, D Marinova², E Goranov¹, Y Slavova², G Yankov¹

From 23rd World Congress of the World Society of Cardio-Thoracic Surgeons Split, Croatia. 12-15 September 2013

Background

The aim of study was to study the prognostic factors after surgery with curative intend for pulmonary carcinoid tumors - typical carcinoid (TCs) and atypical carcinoid (AtCs).

Methods

Surgically resected specimen (men n = 59; women n = 72, age 48 ± 15) from 111 TC (84.7%) and 20 AtC (15.3%) patients were studied. The histological type, T-status, N-status (TC - 94 N0, 17 N1/2; AtC - 16 N0, 4 N1), pTNM stage (TC-I n = 81, II n = 17, III+IV = 13; AtC-I n = 12, II-IV n = 8), surgery (55 simple lobectomies, 16 bilobectomies, 24 pneumonectomies (4 extended), 15 segmentectomies, 16 sleeve lobectomy (in 2 of them combined with sleeve resection of pulmonary artery), 5 sleeve resection of main bronchus), and immunohistochemical expression (on 64 TCs and 13 AtCs) of p-HspB5, Hsp27 and mTOR were evaluated. Kaplan-Meier, Wilcoxon, Cox regression analyses were the statistical methods used.

Results

The overall 5-, 10- and 15-year survival for TCs were 84%, 70% and 62% respectively; and for AtCs-53% and 0%. The difference in mean survival time between TCs (14 years) and AtCs (7 years) was significant (p = 0.004). The median survival time was significantly longer in N0 status (N0-213 months, N1/2-54, p = 0.002), in I and II pTNM status (I/II-213 months, III/IV-27, p = 0.020) and in cases positive for mTOR (p = 0.035). T status, p-HspB5, Hsp27 expression were not statistically significant factors for survival (p > 0.05). The Cox analysis

confirmed the prognostic significance of histology type (HR 3.32; p = 0.007), N status (HR 3.51; p = 0.014) and pTNM stage (HR 11.27; p < 0.001).

Conclusion

Postoperative survival is significantly related to the histology type, N status, pTNM stage and mTOR expression.

Authors' details

¹Thoracic Surgery, Saint Sophia University Hospital for Pulmonary Diseases, Medical University, Sofia, Bulgaria. ²Pneumology, Saint Sophia University Hospital for Pulmonary Diseases, Medical University, Sofia, Bulgaria.

Published: 11 September 2013

doi:10.1186/1749-8090-8-S1-O231

Cite this article as: Petrov et al.: Surgical treatment for bronchial carcinoid tumors prognostic factors for long-term outcome. *Journal of Cardiothoracic Surgery* 2013 **8**(Suppl 1):O231.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



* Correspondence: danail_petrov@hotmail.com

¹Thoracic Surgery, Saint Sophia University Hospital for Pulmonary Diseases, Medical University, Sofia, Bulgaria

Full list of author information is available at the end of the article