

Bronchopulmonary carcinoids in Iceland – A Nation-wide Clinicopathological Analysis

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Objective: Carcinoid tumors are most frequently found in the gastrointestinal tract (i.e. appendix), but rarely they are found in the respiratory tree. Usually carcinoids behave as benign neoplasms, however, in some cases they can metastasise. The aim of this population-based study was to evaluate the epidemiology, histology and results of treatment for bronchopulmonary carcinoids in Iceland.

Material and methods: A retrospective nation-wide study including all cases diagnosed in Iceland from 1980-2005. Information was gained from medical charts and surgical reports. The cases were staged (TNM staging of lung cancer), survival calculated and histology of all the cases reviewed.

Results: A total of 46 patients were diagnosed (17 males and 29 females, median age of 47 years, range 20-86 years), which is 1.7% of all of lung malignancies diagnosed during this 15 year period. The most common presenting symptoms were cough and pulmonary infections, but 30 patients were diagnosed incidentally, most often after chest CT or MRI performed for unrelated disease. The tumor was located centrally in the lung in 31 cases, more often in the right lung. The medium diameter was 2.6 cm (range 1-5.5 cm). Histology was most often classical (90%) but 4 patients had the more malignant atypical form. One of these patients died from cerebellar metastases and another patient had recurrent carcinoid tumor with distant metastases. Two patients had mediastinal lymph node metastases (stage III) and 33 and 2 patients were diagnosed on TNM stage I and II, respectively. All the patients were operated on, lobectomy being the most common procedure (87%). Only one patient had a pneumonectomy. No patients died within 30 days postoperatively. At follow-up only 2 out of 46 patients had died of the disease (4%).

Conclusion: Incidence of bronchopulmonary carcinoids in Iceland is similar to neighbouring countries. In most instances these tumors behave as benign neoplasms. However, in some cases these tumors can spread to intrapulmonary and/or mediastinal lymph nodes and even to other distant organs. The results of surgery are good and the long-term prognosis excellent.