一系列原發性肺類肉瘤癌個案分析 A case series of primary sarcomatoid carcinoma of lung

黃虹綾1、吳韋璁1、蔡明儒1、林脩涪4、黃明賢1,2,3

高雄醫學大學附設中和紀念醫院內科1、高雄醫學大學醫學院呼吸治療學系２、醫學系３、高雄醫學大學附設中和紀念醫院病理科4

Background:
Sarcomatoid carcinoma of the lung is an uncommon histologic subtype of non-small cell lung cancer (NSCLC), which composed of carcinomatous and sarcomatous cellular components. It is often misdiagnosed due to the rarity and may be confusing for the uncertainty of the parental cell origin, which may be primary in, or metastatic to, the lung and pleura. The diagnosis mainly depends on morphologic, histological variability, targeted immunohistochemical studies and usually requires correlation with the clinical symptoms and image findings. Sarcomatoid carcinoma is generally considered to be more aggressive and have worse prognosis than most other types of NSCLC, and accurate diagnostic workup is crucial for the management of this rare tumor. However, there is no standard treatment guideline for the sarcomatoid carcinoma due to its rarity.
Materials and Methods:
We retrospectively surveyed and re-examined the 2214 lung cancer samples stored in a university hospital during a 12-year period (from January, 2002 to June, 2013), including 2029 cases of NSCLC and 185 cases of small cell lung cancer (SCLC). After identifying cases of sarcomatoid carcinoma, we reviewed the medical records. The incidence, risk factors, clinical features, image characters, immunohistochemical features, treatment and prognosis were analyzed.
Results :
We identified only eight cases, five males and three females, of sarcomatoid carcinoma during the study period, which accounted for 0.4% of NSCLC and 0.36 % of all lung cancer. The patients' age ranged from 43 to 76 years old with a mean age of 56.8 years old. None of them had a remarkable medical or family history; five patients were smokers and the others were ex-smokers. The main initial presenting symptoms included productive cough, hemoptysis, and localized chest pain. All of them had a high level of serum tissue polypeptide antigen (TPA) on the initial diagnosis. On chest radiograph, these cases mostly presented with peripheral nodular opacity or mass, with the size varied from 1.5 cm to 16.9 cm in diameter. Microscopically, based on the WHO 2004 criteria, five cases were classified as pleomorphic carcinoma (four of them had an epithelial component, and one composed exclusively of spindle and giant cells), and the other three were classified as spindle cell carcinoma (composed of only malignant spindle cells). The clinical courses were aggressive, and all of these eight patients had distant metastases at initial diagnosis, including bone, brain and liver metastases. Six patients received chemotherapy, and two of them had concurrent radiotherapy; the other two patients received only supportive care. The follow-up period ranged from 4 days to 62 months, with a mean of 19.6 months and a median overall survival of 10 months. A survival more than three years was observed in two patients. The overall 5-year survival rate was 12.5%.

Conclusion :
Primary pulmonary sarcomatoid carcinoma is a rare but aggressive malignancy. We identified eight cases of pulmonary sarcomatoid carcinoma from 2214 lung cancer samples in our hospital during a 12-year period. Accurate and timely diagnosis and proper management remain the key for better patient outcome.