中文題目：非典型復發的甲狀腺乳突癌以肺部及心包膜轉移為表現的個案報告

英文題目：Atypical Recurrence of Papillary Thyroid Carcinoma with Presentations of Pulmonary and Pericardial Metastasis – A Case Report

作　　者：杜青玲[1]，姜和均[1]，李美月[1]，辛錫璋[1]，洪薇雯[1]

服務單位：[1]高雄醫學大學附設中和紀念醫院內科部內分泌新陳代謝科

Introduction:

The global mortality from differentiated thyroid cancer is < 2% at 5 years. The risk for the recurrence of differentiated thyroid cancer with good response to standard treatment is 0.2-1.4%. We reported a case of stage I papillary thyroid carcinoma (PTC) who received standard treatment but then developed distant metastasis to the lung and the pericardium three years later without obvious evidence of local recurrence and undetectable thyroglobulin level.

Case presentation:

The 45-year-old female, diagnosed of PTC at the age of 42, received total thyroidectomy, radioiodine ablation therapy (150mCi), and long-term thyroid stimulating hormone (TSH) suppression with thyroxine. Her pathology report showed T2(m)N1bM0, stage I (follicular variant; BRAF negative). Due to the intermediate risk status, TSH was aimed at below 0.5 μIU/ml. Routine follow-up of thyroglobulin level was undetectable and thyroglobulin antibody was negative. Regular exams with thyroid sonography did not reveal any evidence of local recurrence. However, she presented to emergency department three years later after PTC diagnosed with progressive dyspnea for three weeks. Chest computed tomography (CT) showed a tumor (7.3cm in greatest dimension) over right upper lung with metastasis in both lungs, liver, and spleen. Besides, pericardial effusion was noted. Bronchoscopic biopsy was poorly differentiated carcinoma, and thyroid origin was favored based on the positive immunohistochemical staining for thyroid transcription factor-1 (TTF-1) and thyroglobulin. Cytology of pericardial effusion showed metastatic carcinoma. Fluorodeoxyglucose (FDG)-positron emission tomography/computed tomography (PET-CT) showed FDG avidity over the right lung mass, bilateral lungs, paratracheal lymph nodes, and multiple hepatic nodules. Since second primary malignancy cannot be excluded, tumor markers were checked and showed elevated tissue polypeptide antigen (TPA, 3352 U/L) with carcinoembryonic antigen (CEA), alpha-fetoprotein (AFP), and squamous cell carcinoma (SCC) antigen within normal range. Based on the finding of bronchoscopic biopsy, Lenvatinib was administered but in vain. Dyspnea progressed to respiratory failure, and no endotracheal intubation or cardiopulmonary resuscitation (CPR) as patient's will. The patient expired three weeks after the recurrence of PTC was diagnosed.

Discussion:

PTC has a propensity for cervical lymphatic spread that occurs in 20-50 % of patients whereas distant metastasis occurs in < 5 % of cases. In patients with distant metastasis, FDG positivity is the most powerful predictor of death. Our case, with metastatic PTC to pulmonary and pericardium but no local recurrence, had undetectable thyroglobulin level and thyroglobulin antibody while FDG positivity was found, which might explain the poor prognosis in the recurrent PTC.