Vanished lung metastases

A 64-year-old woman presented with chest tightness and progressive dyspnea for 1-week period. She was diagnosed as invasive ductal carcinoma of breast with skin, bone and bilateral pulmonary metastasis (cT4dN2M1, stage IV; Figure 1a) 2 months prior to this arrival. She initially received weekly paclitaxel (80 mg/m²) as first-line palliative chemotherapy. Physical examination revealed diminished breath sound in right lung. Chest radiography found pneumothorax and collapsed right-side lung and computed tomography (CT) showed regression of most pulmonary metastases with cavitations and bullas (Figure 1b). Tube thoracostomy was performed upon hospitalization but pneumothorax without lung full expansion persisted in subsequent 3 weeks. She underwent video-assisted thoracoscopic wedge resection of right middle and upper lobes and mechanical pleurodesis. The pathology confirmed metastatic adenocarcinoma of breast origin, with 90% positivity for estrogenic receptors, 50% positivity for progestin receptors and 5% positivity for human epidermal growth factor receptor 2. The chest tube was removed 1 week after surgical intervention and the chest radiography showed multiple cystic lesions over both lungs without pneumothorax recurred. The patient was discharged home with room air and smooth respiratory pattern. At 2-month follow up, the chest CT showed multiple bullas formation with diminished metastatic lung metastasis and parenchyma in both lungs. The patient remains alive and received out-patient department follow up till now.

Secondary spontaneous pneumothorax (SSP) is a pneumothorax that associated with a complication of clinically lung disease. Chronic obstructive pulmonary disease is the most common cause of SSP.1 Lung malignancy is a rare cause of SSP and primary lung cancer is more common than metastatic

Figure 1. (a) CT of chest revealed multiple pulmonary metastases upon diagnosis. (b) Chest CT demonstrated multiple pulmonary metastases turning into bullas and cystic lesions and collapsed right-side lung after cytotoxic chemotherapy paclitaxel treatment.
disease.\textsuperscript{1,2} Rapid tumor regressions with multiple pulmonary lacunae and bullae formation can be encountered when metastatic lung cancer is highly responsive to cytotoxic chemotherapy and needs clinical precaution.

Conflict of interest: None declared.

Photographs and text from: Y.-C. Tseng, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan; M.-S. Dai, Division of Hematology and Oncology, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan.

email: dms1201@gmail.com

References
