

中文題目：間變性淋巴瘤激酶(ALK)轉位基因突變在肺腺癌分期中扮演角色：案例報告

英文題目：Anaplastic lymphoma kinase (ALK) translocation plays a role in staging of lung adenocarcinoma: a case report

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Background: Anaplastic lymphoma kinase (ALK) fusion oncogene was an important molecular clinicopathologic subset group in non-small cell lung cancer (NSCLC). It could not only offer another choice for target treatment but also could be considered as a tool other than pathohistologic study for clinical strategy. Here we presented a case with bilateral adenocarcinoma mimic to lung to lung metastases but changed diagnosis to double primary early lung cancer using ALK translocation study.

Case Report: The 47-year-old woman without any systemic disease came to our out-patient department for anterior chest wall pain for 2 weeks. Chest X-ray found revealed two 1cm pulmonary nodules in left upper lobe and right lower lobe and further Chest CT showed no lymph node or other site involvement. Bilateral needlescopic video assisted thoracoscopic surgery (VATS) wedge resection was done and pathology report showed both wedge resection lesion adenocarcinoma, with lepidic predominant, grade 1, in left upper lobe and acinar predominant, grade 3. Whole body bone scan and brain computer tomography revealed no evidence of distant metastases. Therefore her staging was suggested to be pT2aN0M1a, stage IV, with M1a caused by contralateral lung to lung metastases. We sent EGFR mutation analysis and ALK gene rearrangement for both side, and both showed negative result in EGFR mutation. However, positive of ALK translocation found in the right lower lobe lesion but negative in left upper lobe. She received chemotherapy with Cisplatin plus Pemetrexed and no signs of recurrence or metastases was found after 6 months follow up

Discussion: Since the era of EGFR mutation, molecular study became another important treatment consideration in addition to conventional treatment based on pathohistology. ALK translocation was another target for molecular based treatment convinced in NCCN guideline. In our case, ALK translocation showed another strong evidence for diagnosis of double primary cancer in addition to subtype of histology and confirmed the role of molecular study in lung cancer treatment.