

中文題目：標靶治療藥物的脫靶效應：慢性骨髓性白血病人服用 dasatinib 引起乳糜胸之病例報告

英文題目：Off-target effects of the targeted-therapy: a case report of dasatinib-induced chylothorax in a CML patient

作者：許朝欽¹, 許瑞峰^{1,3}, 吳寬澧^{1,2}

服務單位：¹高雄醫學大學附設醫院內科部, ²高雄醫學大學附設醫院胸腔內科, ³高雄醫學大學附設醫院血液腫瘤內科

Introduction

Dasatinib is a second-generation potent and efficacious oral tyrosine kinase inhibitor, frequently used for imatinib-resistant or -intolerant BCR - ABL –positive chronic myeloid leukemia (CML) and for Philadelphia chromosome–positive acute lymphocytic leukemia. The most common adverse events associated with dasatinib therapy are skin rash, gastrointestinal upset, pancytopenia, pulmonary hypertension, and fluid retention, including pleural effusion. However, chylothorax has rarely been reported. Here, we present a case with dasatinib-related chylothorax .

Case presentation

A 51-year-old man with CML, diagnosed 8 years ago, was initially treated with imatinib 400mg daily. Due to molecular relapse of CML after three years of treatment, dasatinib 50mg twice daily was given in substitution of imatinib. The log reduction achieved complete molecular response three months later. However, he had suffered from dyspnea after 50 months of dasatinib use. Chest radiography revealed bilateral pleural effusion. Ultrasound-guided right thoracentesis revealed lymphocyte-predominant exudative effusion . Chylothorax was determined based on elevated triglyceride concentration (135mg/dL). Excluding other possible causes of chylothorax, the dasatinib-induced chylothorax was concerned. Dasatinib was discontinued and replaced by nilotinib. Afterward, no recurrence of pleural effusion was recorded on the following image check-up.

Discussion

Dasatinib is a second-generation potent and efficacious oral tyrosine kinase inhibitor. Pleural effusion was one of most common adverse events with Dasatinib. And chylothorax was rare. Chylothorax is caused by chyle leakage from the thoracic duct into the pleural space. And the most common cause of chylothorax was trauma or surgery. And non-traumatic causes including malignancy, sarcoidosis, and superior vena cava thrombosis. It is most likely that the cause of the chylothorax in our case was dasatinib therapy. The management of dasatinib-related pleural effusion including diuretics and a short course of prednisone. Shift of another tyrosine kinase inhibitor is an option if chylothorax is intractable.

Reference:

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