

中文題目：新型流感 (H1N1)併發肺栓塞之病例報告

英文題目：Bilateral Pulmonary Thromboembolism in Novel Swine-Origin Influenza A (H1N1) Virus Infection

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Abstract:

Swine flu is a highly contagious acute respiratory disease caused by a subtype of influenza A virus. Herein we present a patient with H1N1 infection complicated with pulmonary thromboembolism.

Case Report:

A 67-year-old female was admitted to hospital for acute shortness of breath following four days of fever, cough, myalgia and malaise. The patient has been in relatively good health except for hypertension. Evaluation with real-time PCR confirmed the Swine H1 influenza A infection. She was prescribed with antiviral drug (oseltamivir). After three days her clinical condition was deterioration by chest pain and rapidly progressive dyspnea. Chest radiography (Figure 1) revealed bilateral hilar prominence. Echocardiography demonstrated dilated right atrium and right ventricle with D-shape of left ventricle and high pulmonary artery pressure. A computer tomography scan (Figure 2) of the chest showed filling defects over bilateral interlobar pulmonary arteries, indicating with pulmonary thromboembolism. The patients were treated with low-molecular-weight heparin and started warfarin. After five days international ratio of prothrombin time was in the therapeutic range. Chest pain and dyspnea were improvement. The patients discharged without any other complications.

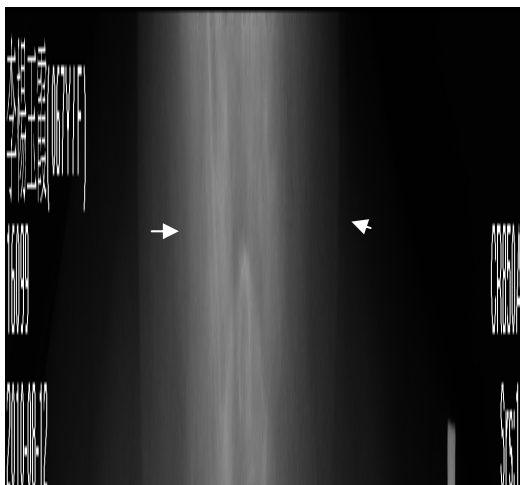


Figure 1. Chest radiography revealed bilateral hilar prominence. (arrowhead)



Figure 2. A computer tomography scan of the chest showed filling defects over bilateral interlobar pulmonary arteries.

Discussion:

The study of laboratory-confirmed swine-origin influenza A (H1N1) virus from Mexico did not show high incidence of pulmonary thromboembolism¹. Knowledge of this complication, which presumably is secondary to a hypercoagulable state, is important not only for the clinicians but also for the radiologists to avoid missing emboli on contrast enhanced computer tomography performed for other reasons. The report suggested that acute-onset pulmonary thromboembolism should be considered in some patients with sudden, unexplained dyspnea during an outbreak of influenza infection and prompt diagnosis is essential to save the patients' lives from acute death associated with influenza². Delay in diagnosis and appropriate treatment of the pulmonary embolism may lead to increased mortality and morbidity. We did not find any predisposing factor such as endothelial damage, hypercoagulable state and stasis, medication use or protein C, protein S or antithrombin III deficiency for thromboembolic event in our patient. It seems that bilateral pulmonary thromboembolism can be a rare finding in patients with swine flu infection.

Reference:

1. Perez-Padilla R, de la Rosa-Zamboni D, Ponce de Leon S, et al. Pneumonia and respiratory failure from swine-origin influenza A (H1N1) in Mexico. *N Engl J Med* 2009; 361: 680-9.
2. Ohrui T, Takahashi H, Ebihara S, et al. Influenza A virus infection and pulmonary microthromboembolism. *Tohoku J Exp Med* 2000; 192: 81-6.