

An unusual case of organizing pneumonia associated with influenza A and haemoptysis

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Introduction

Organizing pneumonia is an inflammatory lung disease which presents sub-acutely with fever, malaise, dyspnoea and non-productive cough. Presenting with haemoptysis is rare. Here we report a patient with organizing pneumonia that presented with productive cough and haemoptysis with positive Influenza-A who responded dramatically to steroids.

Case report

A 58year-old woman with hypertension and type-2 diabetes presented with productive cough, haemoptysis, low-grade fever and worsening shortness of breath for one month.

She was tachypnoeic and cyanosed. Oxygen saturation was 60%. There were diffuse bilateral crackles and wheezes.

Initial investigations showed white-cell-count of $6 \times 10^9/L$ and haemoglobin of 11mg/dl. Erythrocyte-sedimentation-rate and C-reactive protein were elevated at 110mm in 1st hour and 150mg/dl respectively. Arterial-blood-gas analysis showed type-1 respiratory failure with marked hypoxaemia. Chest radiograph showed diffuse bilateral consolidations.

She was given broad-spectrum antibiotics, oseltamivir and non-invasive respiratory support with no improvement.

Further investigations showed no evidence of tuberculosis (negative sputum for acid-fast-bacilli, negative sputum culture for mycobacterium tuberculosis.) ANCA and ANA were negative. HIV screening was negative. Nasopharyngeal aspirate for influenza-A Polymerase-chain-reaction was positive.

High resolution CT scan of chest showed extensive bilateral consolidations involving both lung fields, predominantly the periphery with intervening ground glass opacities and areas of reverse-halo-sign.

A diagnosis of organizing pneumonia was made and she was started on methyl-prednisolone pulse therapy for which there was a rapid and marked improvement of hypoxaemia. She further improved oral prednisolone and currently she is followed up in outpatient clinic with no evidence of a recurrence.

Discussion

This patient did not improve with oseltamivir although there was evidence of Influenza-A suggesting that the virus may have triggered the process of organizing pneumonia.

Furthermore hemoptysis and severe hypoxaemia are uncommon presentations of organizing pneumonia. This case illustrate that a high degree of suspicion is needed to diagnose this condition which responds very well to steroids.