Diversity in pulmological presentations of influenza type A

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Influenza can lead to many serious complications including acute respiratory distress syndrome, sepsis and death. Cases of severe respiratory insufficiency are more likely to be connected with influenza type A. It can present as cryptogenic organizing pneumonia (COP), nonspecific interstitial pneumonia (NSIP), bronchopneumonia or acute interstitial pneumonia (AIP). Here we will present three cases of influenza infection that resulted with severe acute respiratory insufficiency but completely different radiological presentation and underlying pathophysiological mechanism. In the first case, 39-year old female developed polymyositis. Chest X-rays showed bilateral atelectasis caused by impaired mucus clearance due to muscle weakness and cough suppression. Improved muscle strength due to corticosteroid therapy along with toilet bronchoscopy resulted in normal radiological finding. Second case was a 44-year old man that presented with ARDS and later on NSIP and, in the last case, a 72-year old female initially presented with typical radiological image of NSIP characterized by consolidations and ground glass opacities. Corticosteroid therapy in all three cases led to significant regression of pathologic changes on chest-X-ray, improvement of general state and respiratory sufficiency. In Influenza type A infections everyone's concern should be pulmonary complications and possibility of evolving respiratory insufficiency. Immunomodulatory therapy such as corticosteroids positively affect the outcome of the disease and fear of bacterial superinfection or viral infection escalation is unjustified. If atelectasis is present we should always think of extrapulmonal causes such as polymyositis.

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