

## CLINICAL COURSE OF LATE DIAGNOSED FATAL CASES OF A (H1N1) INFLUENZA IN POLAND

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**Background:** During the season 2009/2010 pandemic A (H1N1) influenza mainly concerned people under the age of 60 years. Chronic diseases, obesity and pregnancy were the main risk factors of the severe and fatal course. The first case of A (H1N1) in Poland was documented on 6th May 2009. 182 patients died because of pandemic influenza by 31 July 2010. Immediate initiation of antiviral therapy, make the clinical course of influenza milder and reduce mortality. **Objective:** To describe the clinical features, clinical course, evolution of symptoms and therapeutic difficulties in late diagnosed cases of A (H1N1) influenza. **Material and methods:** A retrospective study of 6 fatal cases of pandemic A (H1N1) influenza, aged 23-41, including 3 women, influenza hospitalized between November 2009 and February 2011 in different Polish medical centers. All patients were confirmed for 2009 H1N1 influenza by rRT-PCR using pharyngeal or nasopharyngeal swabs.

**Results:** 4 patients had risk factors of severe disease: obesity, pregnancy, arthritis and Wegener granulomatosis. None of them was vaccinated against influenza. 5 patients had fever over 38°C, cough and fatigue before the hospital admission. 1 person had nosocomial infection and also presented these symptoms. 4/5 people before the hospitalization had been seen by the doctors many times, treated with antibiotics, none of them had received antiviral therapy. The cause of visiting the hospital was lack of physical condition improvement or intensification of symptoms despite the treatment. The duration of symptoms before hospitalisation ranged from 3 to 8 days. The time from the symptoms onset to the oseltamivir treatment initiation was 4-9 days. All patients developed pneumonia complicated by an acute respiratory distress syndrome (ARDS). Microbiology diagnostics revealed bacterial superinfection in 2 cases - *Staphylococcus aureus* MLSB (+) and *Acinetobacter baumannii*. Death appeared between 4 to 27 days from the symptoms onset. The autopsy revealed haemorrhagic pneumonia in 2/5 cases. **Conclusions:** Respiratory failure was the main cause of death during pandemic influenza. An important impact on mortality during A (H1N1) influenza is delayed diagnosis and antiviral treatment initiation. First of all, the patient with fever, cough and fatigue during the influenza epidemic has to be suspected of having influenza. If there are risk factors of severe disease, antiviral treatment must be initiated immediately. Delayed diagnosis and antiviral treatment initiation, as well as disregard of the risk factors, had a significant impact on mortality during A (H1N1) influenza.