

Influenza A H1N1 과 동반되어 성인에서 발생한 용혈성 요독 증후군 1례

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Pandemic H1N1 Influenza A Viral Infection Complicated by Atypical Hemolytic Uremic Syndrome and Diffuse Alveolar Hemorrhage

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Influenza A is a rare but possible cause of de novo atypical HUS. Recently, several pediatric cases reported that novel swine-origin influenza A H1N1 strain triggered atypical HUS but, there were no reported case of H1N1-associated atypical HUS accompanied with pulmonary alveolar hemorrhage in adult patient.

In December 2010, a previously healthy 27-year-old Korean man was transferred to Pusan National University Hospital with a 5-day history of fever, malaise, cough with progressive blood tinged sputum and oligouria. He was previously diagnosed to influenza A H1N1 infection and oseltamivir was administered for 2 days. His initial lab finding showed hemolytic anemia with schistocytosis [hemoglobin 11.1 g/dl, schistocytosis 8-10/HPF (Fig 1a.), thrombocytopenia (Platelet 26,000/uL), lactate dehydrogenase >6000 IU/L, aspartate transaminase >254 IU/L, total bilirubine/direct bilirubine 2.00/0.66 mg/dL, direct and indirect coombs' test: normal with marked elevated BUN/Cr (60.5 mg/dL/7.93 mg/dL). Chest X-ray showed bilateral diffuse haziness. Atypical HUS and pulmonary alveolar hemorrhage triggered by influenza A H1N1 infection was suspected and emergent plasma exchange with hemodiafiltration for atypical HUS and meticulous supportive care for pulmonary alveolar hemorrhage was started. Oseltamivir was administered adjusted to CRRT dose for 10 days. Hemodiafiltration was tapered to day 13, plasma exchange was tapered to day 17. With the 30 days of meticulous supportive care, HUS was resolved and Cr level was fallen to 1.17mg/dL on day 30.

We report a successful case of atypical HUS with pulmonary alveolar hemorrhage triggered by H1N1 and treated with oseltamivir, plasma exchange and continuous hemodiafiltration therapy.

Key Words: 신종플루, 용혈성 요독 증후군, 미만성 폐출혈

Influenza A H1N1, HUS, Diffuse alveolar hemorrhage