中文題目:紅斑性狼瘡引發嚴重瀰漫性肺泡出血-病例報告

英文題目: Diffuse Alveolar Hemorrhage in a Systemic Lupus Erythematosus Patient: A Case Report

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Introduction:

Diffuse alveolar hemorrhage (DAH) is a rare life-threatening complication in systemic lupus erythematosus (SLE) associated with a high mortality rate. Most frequently, DAH is a symptom of pulmonary capillaritis as seen in autoimmune diseases or after hematopoietic stem cell transplant. The clinical syndrome is characterized by hemoptysis, falling hematocrit, hypoxemic respiratory failure, and diffuse pulmonary infiltrates. We report a case of DAH complicating SLE flare-up in a female patient after treatment with plasmapheresis, and immunosuppressant therapy that showed clinical and radiological improvement.

Case Report:

This 56 years-old female patient was well in the past. She complained sore throat, productive cough and occipital throbbing pain for more than three weeks. She was brought to emergency room by her family and coarse breathing sound was noted. The laboratory testing revealed leukocytosis and hypokalemia. Chest x-ray showed consolidative lesions in bilateral lung fields. After admission, moxifloxacin was given for community acquired pneumonia, but rapid progress of bilateral lung field infiltration with intermittent hemoptysis and progressive dyspnea were noted. Autoimmune biomarker showed positive results, ANA = 640x (+), C3c = 63, C4 = 5.9. The autoimmune disease related diffuse alveolar hemorrhage was suspicious, pulse therapy with Solu-medrol 1gm intra venous (IV) QD was given. Persistent dyspnea with hemoptysis was developed. Nephrologist was consulted and double filtration plasmapheresis (DFPP) was performed on 10/30 and 10/31, but due to poor treatment efficacy, we shifted DFPP to total plasma exchange therapy on 11/1,3,4. Solu-medrol 40mg iv with cyclophosphamide 600mg iv was given on 11/2 as rheumatologist suggestion. Due to improved dyspnea and fair SpO2, chest x-ray follow-up and infiltration improved with no more hemoptysis. She was transferred to ordinary ward on 11/5. Anti-dsDNA, C3c, C4 showed improving and dyspnea improved. Under stable condition, she was discharged on 11/12 with scheduled OPD follow up.

Discussion:

Alveolar hemorrhage is a rare but lethal complication of SLE and represents a remarkable challenge in treatment. It should be diagnosed promptly with falling red cell indices and new infiltrates on chest radiograph. Alveolar hemorrhages frequently recur despite ongoing immunosuppressant therapy. Early treatment with intra venous (IV) pulse methylprednisolone and IV cyclophosphamide should be administrated for a better outcome.