中文題目：干擾素導致嚴重自體免疫性血小板低下

英文題目：Interferon-induced severe autoimmune thrombocytopenia

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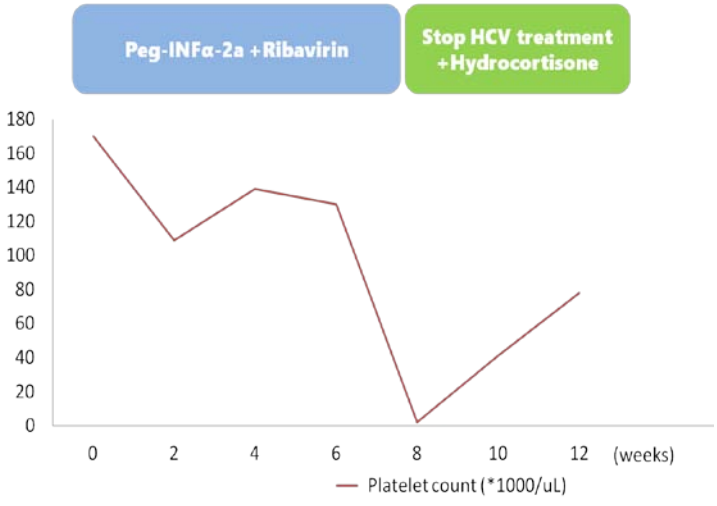
Introduction

Interferon (IFN) combined with ribavirin is an accepted method for the treatment of chronic hepatitis C. The possible side effects induced by this combined therapy have been widely recognized including mild to moderate thrombocytopenia due to inhibition of proliferation and differentiation of stem cells in the bone marrow by IFN. However, IFN may very rarely induce severe life threatening immune-mediated thrombocytopenia (<50000/uL) due to the production of autoantibody against thrombocytes rather than inhibition of the bone marrow alone.[1-4] The present case report described a patient with chronic hepatitis C and suspected Sjogren's syndrome suffered from severe life threatening IFN-induced autoimmune thrombocytopenia and complete recovery after management.

Case Presentation

This 51-year-old female patient with chronic hepatitis C (HCV genotype 2, pretreatment HCV-RNA:34525IU/ml) and hypertension received Peg-INFα-2a (180 mcg/wk) plus ribavirin (1000 mg/d) therapy since October 2015. The pretreatment platelet, white and red blood cell counts, and spleen size were all within their normal limits and no evidence of liver cirrhosis was found by ultrasonography. Gingival hemorrhage, ecchymosis and petechiae attacked from the 7th week of therapy. The platelet count decreased from the initial 170000/uL to 1000/uL at the 8th week of therapy. Chronic hepatitis C combined with Sjogren's syndrome was suspected by rheumatologist based on positive result for anti-Ro test and symptoms of dry eyes and mouth. No other reasonable cause of this thrombocytopenia was found except IFN. The IFN and ribavirin combined therapy was immediately stopped and the patient was treated by single donor platelet transfusion for a total of 6 units in 3 days (1st day:2 units, 2nd day:1 unit, 3rd day 3 units) and administration of corticosteroids (intravenous Hydrocortisone 100mg per 6 hours, total 500mg). The platelet count increased to 41000/uL 1 week later and persistently increased to normal range 2 months later. Although the IFN and ribavirin combined therapy was prematurely interrupted, the HCV RNA became undetectable during follow-up (10 months from the start of IFN treatment) and sustained virologic response (SVR) was achieved in



this patient.

Discussion

The IFN-induced severe life threatening immune-mediated thrombocytopenia was very rare and only 25cases was found in the literature review.[2] The reported responsive treatments included stopping IFN, administration of corticosteroids, intravenous immunoglobulin (IVIG), and even Rituximab. Low pretreatment platelet or neutrophil count, liver cirrhosis and increased spleen length and increased alkaline phosphatase level, which were not observed in this patient, were reported as potential predictors for IFN-induced severe thrombocytopenia.[3] [4] The patient was suspected to have Sjogren's syndrome based on positive anti-Ro test and symptoms of dry eyes and mouth. However, these evidences were not sufficient to differentiate whether it was primary Sjogren's syndrome or secondary to chronic hepatitis C infection. Nevertheless, our report suggest that patient with chronic hepatitis C and suspected Sjogren's syndrome treated by IFN should be closely followed for the early discovery the possibility of severe life threatening thrombocytopenia.

Reference

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