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Letter to the Editor

Correlation of idiopathic thrombocytopenic purpura (ITP) with anti-microsomal antibody

To the Editor:

Relating to the information reported in the case report 'Improvement of Idiopathic Thrombocytopenic Purpura by Antithyroid Therapy' by K. Sugimoto in the January 2005 issue, Vol. 74, pp. 73–74 (1), we found a correlation between the level of anti-microsomal antibody and the number of platelets. Antibodies to thyroid microsomal antigen and protein (thyroglobulin) are markers for human auto-immune thyroid disease and one or both antibodies are present in almost all Hashimoto disease and 70%–90% Graves' disease (2, 3).

A 25-year-old woman was admitted to our hospital ward in April 2003 with multiple purpura with leg bruises and notable thrombocytopenia. Physical examination showed nothing unusual except for the purpura and bruises. An abdominal sonography documented a healthy liver and spleen. Complete blood cell count showed the hemogram (Hb) was 10.8 g/dL, white blood cell count (WBC) was 5.54×10^9/L, and platelet (Plt) count was 4×10^9/L. Anti-microsomal antibody was 1 : 409 600. Trephine biopsy revealed normocellular marrow with a marked increase of normal to slightly small sized megakaryocytes. Intravenous hydrocortisone at 200 mg every 6 h was prescribed and then tapered according to the platelet count. The platelet count recovered rapidly 2 wk after admission and the patient was discharged. One month after admission, the anti-microsomal antibody was rechecked and showed a level less than 1 : 20.

In November 2003, the patient returned for a follow-up examination. Complete blood cell count showed Hb was 11.9 g/dL, WBC was 8.72×10^9/L, and Plt was 102×10^9/L, while the anti-microsomal antibody was 1 : 653 600. Oral prednisolone at 0.5 mg/kg/d was prescribed and the platelets recovered rapidly. We did not recheck the anti-microsomal antibody during the follow-up examinations. In another 6 month later, she returned for a check up and the platelet count was 133×10^9/L. Presently, this patient is in good health.

Several mechanisms have been proposed to cause idiopathic thrombocytopenic purpura (ITP), nonetheless, autoimmune-related diseases play important roles in ITP (4) and autoimmune-related thyroid disease is among them. So far, there have been only two published articles discussing the relationship among thyroid disease, thyroid hormones and ITP (1, 5) and rare cases have been reported about the relationship between Grave disease and ITP (6).

This case report suggests that the anti-microsomal antibody may be an indicator for ITP, while determining the underlying relationship and mechanism needs further clinical investigations.

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