Bolus Methylprednisolone Therapy in Chronic Idiopathic Thrombocytopenic Purpura in Children

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The correspondence of Oto et al. [1] entitled ‘Pulse methylprednisolone therapy in idiopathic thrombocytopenic purpura’ in the November 1983 issue of the Journal gives me an opportunity to summarize our results of this treatment in children with chronic thrombocytopenic purpura (ITP). Since we had very good results in childhood aplastic anemia cases with bolus methylprednisolone, it was administered to the patients with paroxysmal nocturnal hemoglobinuria with bone marrow failure, chronic myelofibrosis and a case of corticosteroid refractory congenital hypoplastic anemia with excellent results [3]. Therefore it was also used in 7 children with chronic ITP because of immunologic basis of this condition as was the accepted explanation of the above disorders.

The age of the 7 patients with chronic ITP ranged between 5 and 13 years, 4 girls and 3 boys. The diagnosis of ITP was based on platelet counts of less than 40 x 10^9/L in all with an excessive or normal number of megakaryocytes in bone marrow. Splenomegaly and lymphadenopathy were not present, and underlying diseases were excluded as far as possible by negative Combs’ tests, LE cell preparations, throat culture and fluorescent antinuclear antibody determinations. Antiplatelet antibodies determined by the method described previously [4] were present in all patients. Anemia was found only in 2 cases, due to recent epistaxis. The duration of ITP was longer than 6 months and prednisone treatment, 2 mg/kg/day, for more than 2 weeks on different occasions had not shown appreciable changes in platelet counts in any of the patients. High-dose intravenous methylprednisolone treatment (30 mg/kg for 3 days; 20 mg/kg for 4 days, then consequently 10, 5, 2 and 1 mg/kg for 1 week each) was used as in aplastic anemia.

Sustained elevation of platelet counts (200 x 10^9/L) was obtained in only 1 patient, a 13-year-old girl. In another patient (5-year-old boy) the platelet count, although rising to 124 x 10^9/L during the first week, returned to the original level during treatment. No changes in platelet counts were observed in the other patients but white blood cell counts (polymorphonuclear) were found elevated in all patients during treatment. Since sustained elevation of platelet count was observed in only 1 patient we cannot advise this treatment for children with chronic ITP.

References