Pulse Methylprednisolone Therapy in Idiopathic Thrombocytopenic Purpurae

A. Ali Oto
T. Tümay Sözen
Y. Yavuz Özişik

Ankara
Ali Oto, Tümay Sözen, Yavuz Özişik, Department of Internal Medicine, Faculty of Medicine, Hacettepe University, Ankara (Turkey)

High-dose intravenous methylprednisolone pulse therapy has recently been tried in various conditions and suggested as a promising alternative [1–5]. We would like to present a case of idiopathic thrombocytopenic purpura (ITP) which failed to respond to high-dose oral corticosteroid therapy but showed a definite recovery with intravenous methylprednisolone given in pulses.

A 32-year-old female was admitted with a complaint of bleeding gums. She had had an upper respiratory tract infection 5 months before. After a few weeks her gums had begun to bleed episodically with a duration of 4–6 days which ceased spontaneously. Additionally she had had menorrhagia for 3 months.

On admission she was pale in appearance. The spleen was not palpable. Ecchymotic areas up to 4 cm in diameter were seen throughout the skin surface. Physical examination was otherwise unremarkable.

Laboratory investigations included a hemoglobin level of 5.8 g/dl, and white blood cell count of 5.8 × 10^9/l. The platelet count was 35 × 10^9/l, and erythrocyte sedimentation rate was 26 mm/h. A peripheral blood film showed moderate hypochromia and anisocytosis in red blood cells, rare platelets with a normal differential count of white blood cells. Serum iron and total iron binding capacity were consistent with moderate iron deficiency. C-reactive protein and rheumatoid factor were negative. Direct and indirect Coombs tests were negative. Antiplatelet antibodies were detected. Antinuclear antibody was found to be negative. Serum immune complexes were increased up to 100% of the normal. A bone marrow aspiration was in accordance with the diagnosis of ITP. Serial testing for ruling out the diagnosis of DIC were unremarkable. A Tc liver and spleen scanning revealed no abnormality. The chest X-ray, IVP and gastrointestinal series were all within normal limits.

After the initial investigations with the diagnosis of ITP and iron deficiency anemia, she was started on oral prednisolone at a dose of 60 mg/day, and iron. Unfortunately, despite 2 weeks of this dosage of oral prednisolone therapy no apparent response was obtained. It was then decided to treat her with intravenous pulses of methylprednisolone 1 g daily for 3 days. Oral prednisolone was resumed, and the dose was lowered gradually. Within 1 week of pulse therapy the platelet count rose to 150 × 10^9/l. No side effects related to the therapy were detected.
In conclusion, after our experience with this patient, we would like to suggest the methylprednisolone pulses as a promising choice between high-dose oral corticosteroid and splenectomy in patients with ITP. In that way we can give a chance of remission before surgery. The value of pulse therapy in this area will be delineated by well-designed and well-controlled studies with large numbers of patients.

References