Methylprednisolone in Childhood Idiopathic Thrombocytopenic Purpura

T.K. Lam, P. Yuen

Hong Kong

The report on methylprednisolone (MP) pulse therapy in childhood chronic idiopathic thrombocytopenic purpura (ITP) by del Principe et al. [1] indicated it to be safe and promising. Our result in 3 children with chronic ITP treated with this drug, however, was discouraging. The 3 patients (2 girls and 1 boy; aged 5, 8 and 8.5 years) had previously received one or more other form of treatment: prednisone, immunoglobulin and splenectomy. MP was given at a dosage of 15 mg/kg/day by intravenous bolus injection for 3 consecutive days. Only 1 girl had a response with definite rise of platelet count from the pretreatment level of $16 \times 10^9$ to above $100 \times 10^9/\text{l}$ 3 days after starting treatment. A normal platelet count was maintained since day 5. However on day 15, she suddenly developed extensive ecchymosis, profuse gastrointestinal haemorrhage and hypotension associated with very marked thrombocytopenia. Platelet count had dropped to $1 \times 10^9/\text{l}$!

The sudden development of severe thrombocytopenia following MP therapy in our patient suggested that the drug ‘on withdrawal’ might have a rebound effect on the natural course of the disease, leading to a precipitate fall in platelet count and life-threatening bleeding. In our experience, therefore, MP was not without hazardous complication. Moreover, it was only occasionally effective. Further studies on this subject are required for more accurate evaluation.

Reference