A Case of Thrombotic Thrombocytopenic Purpura Successfully Treated with Cyclophosphamide

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Dear Sir,

A 23-year-old man was admitted to the hospital because of macrohematuria and malaise. He had a history of a common cold 5 days before admission. The family history revealed that his brother was admitted at the same time to another hospital, and hemolytic-uremic syndrome was diagnosed. A sister died of renal failure after an infection at the age of 3 years abroad. Seven years ago, the patient already suffered from a hemolytic-uremic syndrome. Remission had been achieved by administering steroids. The pentad of findings – neurological changes (lethargy), renal dysfunction, hemolytic anemia (Coombs negative), thrombocytopenia, and fever – led to the clinical diagnosis of thrombotic thrombocytopenic purpura (TTP). Plasma exchange therapy was instituted, and prednisone (100 mg daily) was given. Under ongoing plasmapheresis the patient suffered four relapses. Vincristine led to severe gastrointestinal disturbances. After infusion of cyclophosphamide (1 g i.v.) on day 29, the thrombocytopenia improved. Daily plasmapheresis was stopped after 40 days, and cyclophosphamide (1 g i.v.) and vincristine (2 mg i.v.) were given in addition to a daily dose of 75 mg of prednisone.

Within 7 days the patient recovered. In our patient it is remarkable that the combination of cyclophosphamide, vincristine, and corticosteroids led to a remission of the TTP even in the absence of plasmapheresis. In contrary, plasmapheresis was not able to prevent relapses of the disease. There was no evidence of a malignancy which could help to explain the effect of the cytostatic agents. To our knowledge, cyclophosphamide has been used successfully mostly in patients suffering from malignan-

cies or lupus erythematosus [1]. Only Bird et al. [2] reported a case of a 26-year-old woman who had no underlying disease and recovered from TTP under treatment with cyclophosphamide. Perhaps it would be useful to investigate whether treatment with cyclophosphamide, vincristine, and corticosteroids could shorten the number of plasmapheresis treatments or help to avoid side effects of vincristine because its dose can be minimized.

References

Udvardy M, Rak K: Cyclophosphamide for chronic relapsing thrombotic thrombocytopenic purpura. *Lancet* 1990;336:1508-1509. Bird JM, Cummins D, Machin SJ: Cyclophosphamide for chronic relapsing thrombotic thrombocytopenic purpura. *Lancet* 1990;336: 565-566.

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