

Ciclosporin for Refractory Aplastic Anemia

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We report 2 patients with aplastic anemia who benefited by ciclosporin treatment.

Patient 1, a 34-year-old male, was diagnosed as having aplastic anemia in November 1987. Past history: 3 months of fatigue, pallor, skin and mucosal bleedings. Aplastic anemia was suspected in another hospital, where he was treated with oxymethalon 150 mg/day for one month. On admission in November 1987, his CBC was: Hb 6.6 g/dl, WBC 2,400/mm³, platelets 20,000/mm³. A bone marrow biopsy showed severe hypocellularity and fatty infiltration. Because there was no histocompatible donor, bone marrow transplantation (BMT) was not considered. He was given antilymphocytic globulin (ALG) for 10 days, followed by oxymethalon 150 mg/day orally for 3 months, with no response. During the entire period he was given supportive therapy of fresh blood and platelet transfusions. His infections were treated with broad spectrum antibiotics. In March 1988, oral ciclosporin (Sandimmune, Sandoz) was begun. On the 12th week of this therapy, his CBC was: Hb 6.8 g/dl, WBC 5,800/mm³ and platelets 50,000/mm³. Since then, the patient did not require further transfusions. Eight months after diagnosis his Hb reached 9.7 g/dl and WBC 4,000/mm³ with normal differential, platelets 140,000/mm³. One year later, the Hb level was 10 g/dl, the other parameters were within normal limits.

Patient 2, a 37-year-old male, had been diagnosed as aplastic anemia in 1985 in another university hospital. He had been treated with considerable doses of oxymethalon, prednisolone and ALG with no response. He was also given supportive therapy by blood transfusions. He was seen in our department in December 1988, where the diagnosis of aplastic anemia was confirmed. Because he had no chance for BMT, oral ciclosporin was begun. At that time, his Hb was 8.0 g/dl, WBC 3,200/mm³ and platelets 3,000/mm³. Eight weeks later Hb was 9.7 g/dl, WBC 3,600/mm³ and platelet count was still low. Six

months later his Hb was 10.6 g/dl, WBC 4,100/mm³ and platelets 120,000/mm³.

In both patients ciclosporin was started at a dose of 10 mg/kg/day. The patients were followed at the outpatient clinic every fortnight when their blood ciclosporin levels, kidney and liver function tests were found to be normal. No side effect was encountered in the first patient, whereas slight gingival hyperplasia and gynecomastia developed in the second [1, 2].

It has been suggested that immunological mechanisms might play a role in the pathogenesis of aplastic anemia. Immunosuppression by ALG and ATG has been extensively used in this disease [1-5]. Ciclosporin is an immunosuppressive drug which inhibits lymphokine production by helper T cells [5]. Some aplastic anemia cases have been reported in the literature in whom ciclosporin was found to be effective [2-5]. Our results support the positive observations reported in the literature.

References

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Accepted: September 1989

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