A CASE OF REFRACTORY ADULT DERMATOMYOSITIS

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A case of adult dermatomyositis was described in oral prednisolone, and over the subsequent 4 weeks her CK fell to 96 IU/l with a resolution of symptoms (Fig. 1). By increasing chlorambucil to 3 mg daily 3 months later, it was possible to reduce the dose of prednisolone to a minimum of 10 mg/15 mg alternate days whilst maintaining a good response. Because of concerns about potential long-term oncogenic side-effects, the dose of chlorambucil was reduced to 2 mg daily in September of 1996, by which time she had a cumulative dose of ~1 g.

About 4 weeks later, a gradual progressive deterioration occurred with muscle aches, skin rashes and dyspnoea. By December 1996, her CK had risen to 1540 IU/l, and pulmonary function testing and repeat high-resolution CT of the chest confirmed early fibrosing alveolitis once more. Despite repeated pulses of i.v. methylprednisolone (3 × 500 mg and 2 × 500 mg) and an increase of chlorambucil to 4 mg daily, the clinical response was small and short lived with a reduction of CK to 151 IU/l. A course of i.v. immunoglobulin infusions was therefore started in February 1997. She received three cycles of 2.0 g of Vigam®/kg body weight at monthly intervals with very good response. After the first dose, her CK fell to 67 IU/l and since then all her symptoms have once again resolved. Repeat pulmonary function testing showed improved gas transfer. It has been possible gradually to withdraw chlorambucil completely and at present she remains well on prednisolone 15 mg daily.

Dermatomyositis can be a difficult condition to treat. Systemic corticosteroids are the first choice of treatment. About a quarter of patients either fail to respond to steroids or develop steroid-related toxicity [2]. Second-line agents are then added either alone, or in combination with steroids. Failure of the disease to respond to second-line agents, and side-effects from these drugs, can then be a problem.

A study of five patients with dermatomyositis unresponsive to prednisolone or other immunosuppressive agents found that chlorambucil was an effective alternative [3]. Benefit was achieved within 6 weeks and corticosteroids were discontinued in all but one patient. Minimal chlorambucil toxicity, consisting of a mild leucopenia in two patients, was reported. Four of the five patients were able to stop chlorambucil after 13–30 months of treatment and the disease remained in remission.

Chlorambucil is an alkylating agent that inhibits DNA synthesis. It has a cytotoxic effect and suppresses the cell-mediated immune response. Both of these actions may be relevant to its role in dermatomyositis.
Bone marrow suppression (usually reversible), teratogenicity and the risk of subsequent lymphoma are potential problems with the use of this drug.

Our patient had disease refractive to the conventional treatment for dermatomyositis. The patient responded well to chlorambucil, but failed to maintain remission beyond 12 months. Despite the potential toxic effects of chlorambucil, we felt justified in trying this agent. Subsequent improvement on gamma globulin therapy is encouraging and in line with recent reports by Dalakas et al. [5].

Chlorambucil can be useful in the treatment of dermatomyositis when conventional therapy has been unsuccessful.

REFERENCES


Fig. 1.—Graph showing creatine kinase levels in response to treatment.