Lymphocyte subsets

Analysis of changes in the distribution of T-cell subsets according to response to therapy showed an increase in the absolute number of CD4 cells in all four patients studied with OR, while in the seven patients with PR, the lymphocyte evolution was heterogeneous; and all three patients who failed to respond to interferon/dexamethasone showed a progressive decrease in CD4 cells (Fig. 1).

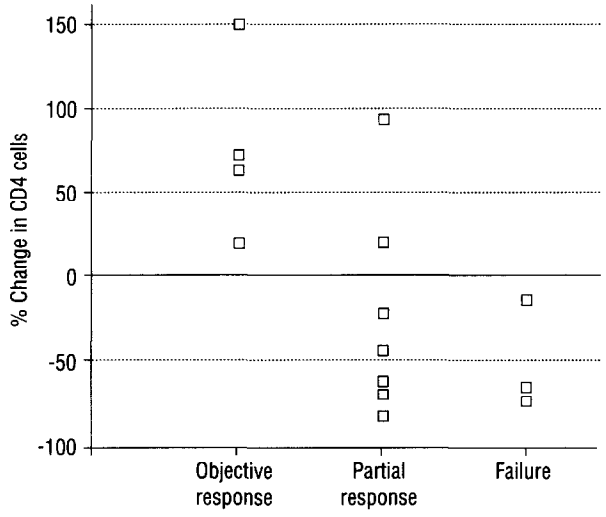

Fig. 1. Percentage increase and decrease in absolute number of CD4 + cells after alpha interferon treatment according to response to therapy.

Toxicity

The protocol was generally well tolerated, with only four patients discontinuing therapy due to adverse effects (confusion, hepatic toxicity, hyperglycaemia, and evolution to overt plasma cell leukaemia). Moderate flu-like symptoms were reported by 51% of the patients, and severe confusion and neuropathy occurred in two patients but resolved on temporary discontinuation of interferon and did not reappear during maintenance treatment. Two further patients required dose reduction for granulocytopenia and thrombocytopenia.

CONCLUSIONS

The present results indicate that the combination of interferon alfa-2b and dexamethasone is effective in the treatment of refractory multiple myeloma patients, including both primarily resistant cases and patients previously resistant to dexamethasone. Although a larger series of patients and a longer follow up is needed to evaluate the long-term efficacy, the use of this combination appears to be a promising therapeutic approach for patients with refractory myeloma.

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*Extended abstract of a paper originally published as: San Miguel JF, Moro M, Bladé J *et al.* Combination of interferon and dexamethasone in refractory multiple myeloma. Hematol Oncol 1990, 8, 185-189.

Acknowledgement – This work was partially supported by a grant from the Educational Council of Castilla-León.

Eur J Cancer, Vol. 27, Suppl. 4, pp. S49-S50, 1991
Printed in Great Britain

0277-5379/91 $3.00 + 0.00

Maintenance Treatment of Multiple Myeloma with Alpha Interferon versus an Alternating Schedule of Alpha Interferon and Chemotherapy

Alice Maniatis for the Greek Myeloma Study Group (GMSG)*

INTRODUCTION

RECENT STUDIES indicate that treatment with alpha interferon, either alone [1] or in combination with chemotherapy [2], can prolong the plateau phase in patients with multiple myeloma. The aim of the present study is to compare the efficacy of alpha interferon versus alternate monthly cycles of alpha interferon and chemotherapy, in maintaining the remission obtained by various chemotherapy

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regimens in patients with multiple myeloma.

PATIENTS AND METHODS

Patients

The study was activated in February 1989. Fifty-eight patients have been entered to date. Patients were divided into two age groups with different treatment protocols: Protocol A included 40 patients aged 65 years or less (median 52 years, range 35-65), and Protocol B included 18 patients over 65 years of age (median 70 years, range 66-75). One patient had stage I disease, 19 had stage II disease and 38 stage III.

Study protocols

Protocol A patients were initially treated with VAD (vincristine 0.4 mg/day, adriamycin [doxorubicin] 9 mg/m²/day continuous intravenous (i.v.) infusion for 4 days, and dexamethasone 40 mg/day i.v. for 4 days), and Protocol B patients with MP (melphalan 6 mg/m²/day orally and prednisolone 48 mg/m²/day orally, both for 5 days).

In both groups, responders were then randomized to receive either alpha interferon alone (3 million units [MU] three times a week [t.i.w.]) for 2 years, or the same dose of alpha interferon alternating in monthly cycles with MP, CP (cyclophosphamide 15 mg/kg i.v. on day 1 and prednisolone 48 mg/m²/day orally for 5 days) and VAD for 2 years (Figs. 1 and 2). Non-

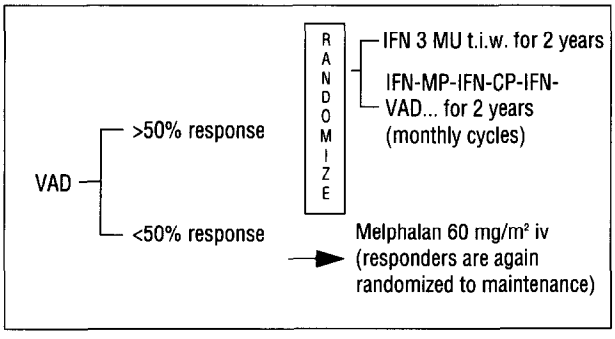

Fig. 1. Treatment Protocol A (patients ≤ 65 years of age).

responders in Protocol A were treated with i.v. melphalan 60 mg/m² and, in Protocol B, with VAD. Responders were then randomized to one of the maintenance schedules.

RESULTS

Out of 58 patients, 23 eligible responding patients were then

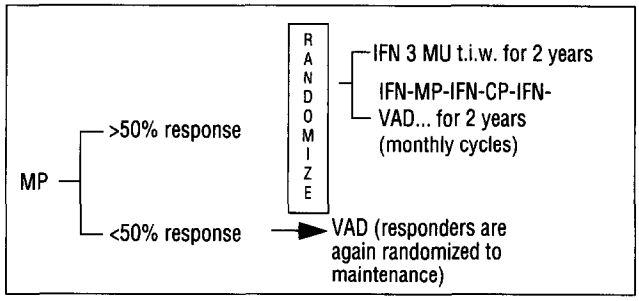

Fig. 2. Treatment Protocol B (patients > 65 years of age).

randomized to receive either alpha interferon (Group I) or alpha interferon alternating with chemotherapy (Group II). There were 11 patients in Group I, with a median age of 62 years (range 42-78); nine patients were in stage III_A and two in III_B. In Group II there were 12 patients, median age 64 years (range 51-80); nine patients were in stage III_A, one in III_B, one in II_B and one in II_A. Preliminary results favour the alternating maintenance treatment, with a median duration of remission of 10 months, versus 6 months in the patients on interferon maintenance alone.

Toxicity was mild and comparable in both groups.

CONCLUSIONS

Alpha interferon given in the dose utilized in this protocol (3 MU t.i.w.) is well tolerated. Considering the predominance of stage III patients in our series, the preliminary results suggest a favourable effect of alpha interferon alternating with chemotherapy in maintaining chemotherapy-induced remissions in multiple myeloma.

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