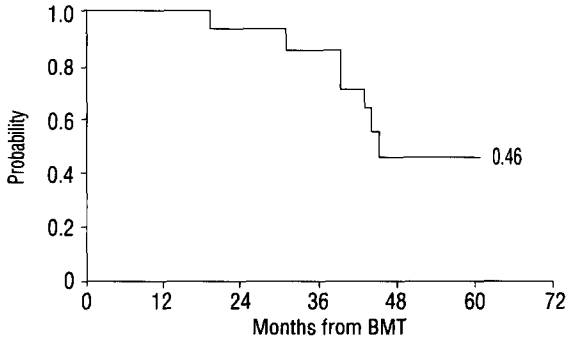

Fig. 3. Response to post-BMT alpha interferon therapy: continuous haematological remission in CML patients with cytogenetic relapse following T-cell depleted allogeneic BMT (Kaplan-Meier curve).

months was better in cytogenetic relapsers (Fig. 2), of whom nearly half also remained in continuous HR (Fig. 3).

CONCLUSIONS

These results suggest that alpha interferon is an effective alternative to conventional chemotherapy in CML patients with haematological relapse after BMT, and that alpha interferon should be considered the treatment of choice for CML patients with a persistent cytogenetic relapse occurring after BMT. A second BMT should be considered only in patients with haematological relapse not responding to interferon therapy. Taking into account the high percentage of Ph^1-positive cells, their persistence and increase during the follow up and, finally, the progression towards haematological disease in some cases, the cytogenetic relapse cannot be considered "transient" in our study.

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Treatment of Ph^1-Positive Chronic Myelogenous Leukaemia with Recombinant Interferon Alfa-2b: A Case Report of Complete Cytogenetic Response

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ABSTRACT

A STUDY was undertaken in which eight patients aged 22 to 80 years with Ph^1-positive chronic myelogenous leukaemia (CML) were treated with interferon alfa-2b at an initial dose of 4 million units (MU)/m^2 per day.

One patient in accelerated phase was pretreated with vindesine and prednisone, and showed an increase in white blood cell count during interferon treatment. In addition, one of the seven patients in chronic phase, who was previously untreated, dropped out because of skin eruption. According to the response criteria of Alimena *et al.* [1], three of the other six patients in chronic phase achieved haematological response (two complete, one partial) and two had cytogenetic improvements (one complete, one minor).

Adverse effects included fever (six patients), malaise (two), anorexia (one), delirium (one), liver disorder (two) and skin eruption (one).

We present here the pre-treatment features and clinical course of a patient who achieved complete cytogenetic response (CCR). A 32-year-old female patient, admitted to hospital because of marked hepatosplenomegaly (spleen 11 cm under the navel) and anaemia, was diagnosed as having Ph^1-positive CML and treated with interferon alfa-2b 6 MU/body daily for 4 months and twice weekly thereafter. Her pretreatment blood cell counts were as follows: red blood cells 2.17 x 10^6/μL; haemoglobin 6.6 g/dL; white blood cells (WBC) 206,700/μL; and platelets 610 x 10^3/μL.

The patient achieved complete haematological response [1] at the 32nd week of interferon administration, together with resolution of hepatosplenomegaly.

Cytogenetic and molecular biological analyses revealed partial suppression of the Ph^1 chromosome at the 38th week (75% Ph^1-positive) and complete cytogenetic response (CCR, 0% Ph^1-positive) at the 140th week of interferon treatment.

In conclusion, long-term administration of interferon alfa-2b alone induced complete suppression of the Ph^1 chromosome in one patient with Ph^1-positive CML, and the duration of this CCR is more than 4 months. The combination of alpha interferon with other treatments in order to enhance cytogenetic improvement should be investigated.

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