REPORTE CORTO / SHORT REPORT

INTERFERON ALPHA-2B IN EPIDEMIC NEUROPATHY

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SUMMARY

More than 40 000 cases of an epidemic Neuropathy were reported in Cuba during 1993. It had two clinical pictures: an optic neuritis and a peripheral neuropathy. IFN treatment had no additional effect, over the vitamin therapy, on the evolution of the optic neuritis. A pooled, stratified, analysis of all the trials indicates that IFN could be useful for the
treatment of the peripheral neuritis associated to the epidemic neuropathy.

INTRODUCTION

More than 40 000 cases of an epidemic Neuropathy were reported in Cuba during 1993. It had two clinical pictures: an optic neuritis and a peripheral neuropathy (1). A nutritional unbalance and toxic as well as opportunistic infectious agents have been involved in the pathogeny of the disease. Several virus isolates were obtained from patients cerebrospinal fluid. One of them was identified as Coxsackie A9 serologically and by partial genome sequence. Its cytopathic effect in vitro is sensitive to inhibition by IFN alpha (2).

METHODS

Several controlled, randomized, clinical trials were carried out with different treatments, among them IFN at various therapeutic regimes, always compared to a basal polyvitamin schedule that was given to all patients. Five IFN trials, performed at 12 hospitals, included 212 patients with optic neuritis and 460 with peripheral neurological symptoms (including the control groups). Patients were less than 3 months sick. IFN alpha2b (Heberon, Heber Biotec, Havana) was given 3 times per week during 3 weeks at 6, 3 or 1 mill. IU per dose, depending on the trial.

RESULTS AND DISCUSSION

IFN treatment had no additional effect, over the vitamin therapy, on the evolution of the optic neuritis. On the contrary, 3 of the trials showed evidences of a beneficial action of IFN on patients with the peripheral form of the disease. Better results where obtained in the trial where the higher dose (6 million IU) was used.

Twenty percent of the patients with IFN recovered after 21 days of treatment vs. 5% in the control group. After 1 month of follow-up, there were significantly more recovered and less worsened patients in the IFN group. In another trial, where IFN (3 million IU) with or without hydroxocobalamine (as a detoxifying agent) was used, there were also significantly better results in the IFN groups than in those without it (70 vs. 56% improvement, 24 vs. 16% recovery, 5 vs. 20% worsening).

A pooled, stratified, analysis of all the trials indicates that IFN could be useful for the treatment of the peripheral neuritis associated to the epidemic neuropathy.

REFERENCES


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