chemotherapy, TF (1 unit daily, subcutaneous) until leukocyte count was $> 2.5 \times 10^9$ /L and platelet count $> 80 \times 10^9$ /L. Group 2 did not receive TF.

RESULTS

Treatment with TF accelerated the recovery of neutrophils, leukocytes, platelets and hemoglobin. The incidence and severity of infections and hemorrhages were less in the TF group than in the control group. There was no evidence that TF accelerated the re-growth of

Days to hematopoietic recovery $(X \pm SD)$

| Parameters | Group 1 (n=10)* | Group 2 (n=9)** | P |
|---|--------------------|--------------------|---------|
| Neutrophilis > 1.0 x 10 ⁹ /L | 4.7 ± 2.4 | 22.6 ± 8.5 | < 0.001 |
| Leukocytes > 2.5 x 10 ⁹ /L | 4.7 ± 2.4 | 21.1 ± 9.3 | < 0.001 |
| Platelets > 80 x 10 ⁹ /L | 7.5 ± 3.7 | 17.6 ± 6.8 | < 0.001 |
| Haemoglobin > 10 G/L | 10 ± 5.5 | 20.0 ± 11.5 | < 0.001 |

^{*}One patient with blast cells in pancytopenia period was not included.

**Two patients that died in aplasia were not included.

Transfusions and antibiotic treatments

| | Group 1 (n=11) | Group 2 (n=11) | p |
|---------------------------------|-------------------|-------------------|-------|
| Red-Cell transfusions (units) | 1.0 ± 1.1 | 3.5 ± 26 | <0.01 |
| Platelet transfusions (units) | 4.1 ± 5.7 | 19.0 ± 14.7 | <0.01 |
| Leukocyte transfusions (units) | 1.4 ± 3.3 | 5.6 ± 9.0 | n.s. |
| Antibiotics (days of treatment) | 10.0 ± 7.1 | 24.9 ± 16.5 | <0.05 |

leukaemic cells. It seems that TF is safe in AL, accelerating haematopoietic recovery. However, it should be used with caution until results of additional trials become available.

REFERENCES

- 1. GALE, R. P., K. A. FOON (1987). Semin. Hematol. 24:40:54
- 2. CHAMPLIN, R., R. P. GALE (1989). Blood 73:1051-2066
- 3. GERSON, S. L. et al. (1984). Ann. Intern. Med. 100:345-351
- 4. OHNO, R. (1989). Nippon Ketsuki Gakkai Zasshi. 50:287:293
- BARDANA, E. J., M. PORTLAND (1985). J. Allergy Clin. Immunol. 75:423-427

INTERFERON ALPHA-2B IN EPIDEMIC NEUROPATHY

Pedro López-Saura¹, Francisco Hernández¹, Tania González¹, Violeta Labarta¹, Raúl Valdés¹, Vivian Sáez¹, Alain Morlans¹ and Cuban Multicenter Group for Clinical Trials with Interferon in Epidemic Neuropathy².

¹Center for Genetic Engineering and Biotechnology, P.O. Box 6162, La Habana 6, Cuba.² "Abel Santamaría" Provincial Hospital, Pinar del Río; Center for Medical and Surgical Research, Havana; Institute of Neurology and Neurosurgery, Havana; "Calixto García" General Hospital, Havana; "Salvador Allende" General Hospital, Havana; "Joaquín Albarrán" General Hospital, Havana; "Luis Díaz Soto" High Institute for Military Medicine Havana; "Gustavo Aldereguía" Provincial Hospital, Cienfuegos; Villa Clara Provincial Hospital, Santa Clara; "Camilo Cienfuegos" Provincial Hospital, Sancti Spiritus; "Manuel Ascunce" Provincial Hospital, Camaguey; Santiago Provincial Hospital, Santiago de Cuba and National Center for Coordination of Clinical Trials.

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 α 2b (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

- 1.- RAMÍREZ, A.; R. RODRÍGUEZ; A. MARRERO; G. MESA; M. A. GALINDO and L. IÑIGUEZ (1993). Neuropatía Epidémica: Breve reseña epidemiológica. Boletín Epidemiológico del Instituto de Medicina Tropical "Pedro Kourí" Núm. Especial 1:1-15.
- 2.- MÁS, P., M. P. RODRÍGUEZ, M. G. GUZMÁN, et al. (1993). Resultados preliminares de laboratorio virológico en estudios de casos de Neuropatía Epidémica. Boletín Epidemiológico del Instituto de Medicina Tropical "Pedro Kourí" Núm. Especial 1:7-8.

USO DE INTERFERON ALFA-2B RECOMBINANTE EN NEUROPATIA EPIDEMICA. PRUEBA TERAPEUTICA. PINAR DEL RIO

Francisco Hernández¹, Violeta Labarta¹, Raúl A. Valdés¹, Vivian Sáez¹, Alain Morlans¹, Maribel Guerra¹, Jorge Venereo², Blanca E. Elliot², Sonia Novales², Carmen Serrano², Julio Conchado² y Pedro López-Saura¹.

¹Centro de Ingeniería Genética y Biotecnología, Apartado 6162, La Habana 6, C.P. 10600 Cuba. ²Hospital Clínico- Quirúrgico Provincial "Abel Santamaría", Pinar del Río.

INTRODUCCION

La Neuropatía Epidémica es una enfermedad que, inicialmente, se caracterizó por déficit visual central con trastorno de visión a color en el eje rojo-verde sin manifiesto defecto pupilar aferente, evidencia de ambliopía ni enfermedad macular definida, con campo visual característico de defecto bilateral y bastante simétrico de las fibras del nervio óptico, que tomaba sólo y específicamente el haz papilo-macular, con escotomas

relativamente pequeños, centrales o ceco-centrales al blanco y mayores al color rojo y verde. Este cuadro se asoció con frecuencia a manifestaciones polineuropáticas (1).

Debido a la existencia de un estado de emergencia nacional, se realizó este estudio motivados por la posible etiología viral y conociendo los favorables resultados obtenidos con el uso del interferón en diversas entidades virales (2-4).

| Evaluación neurológica (60 días) | | | | | | | | | |
|----------------------------------|-----------|----|---|-------|---------------------|----|---|-------|--|
| | Vitaminas | | | | IFN-α2b + Vitaminas | | | | |
| | L | М | s | Total | L | М | s | Total | |
| Recuperado | 1 | 6 | 1 | 8 | 3 | 11 | 1 | 15 | |
| Mejorado | 1 | 10 | 3 | 14 | 0 | 15 | 7 | 22 | |
| Igual | 1 | 6 | 2 | 9 | 0 | 3 | 0 | 3 | |
| Empeorado | 0 | 3 | 3 | 6 | 0 | 1 | 1 | 2 | |
| Total | 3 | 25 | 9 | 37 | 3 | 30 | 9 | 42 | |

Leyenda: L: Ligero, M: Moderado, S: Severo.