Interferon Alpha 2a in Patients of Chronic Hepatitis C

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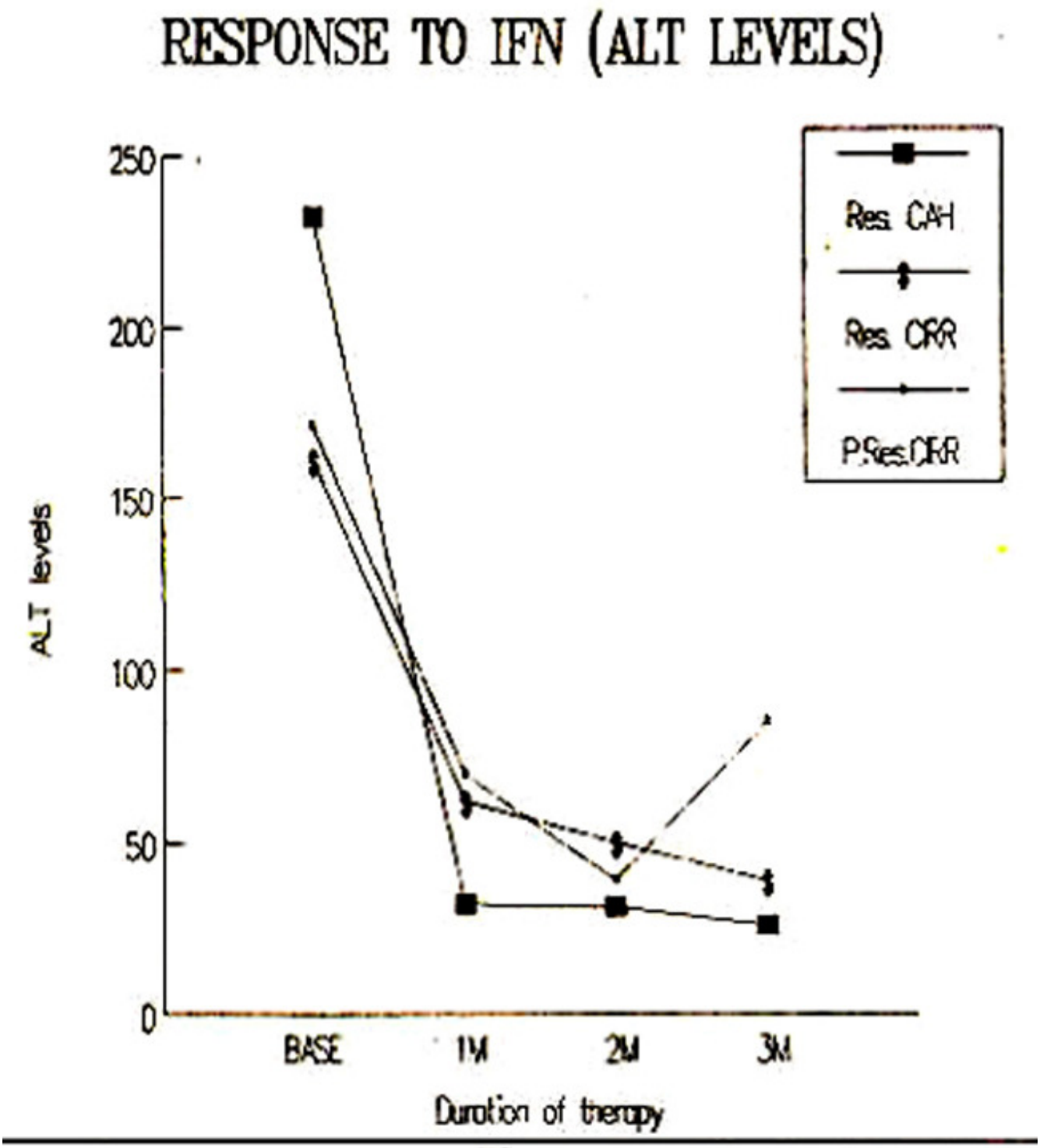
Hoofnagle et al.[1] were the first to describe that interferon alpha, when given to patients with non-A, non-B hepatitis, was able to normalize liver enzyme levels in a substantial number of patients. They also noted that relapses might occur if treatment was discontinued[1]. This observation was confirmed by other smaller controlled and uncontrolled studies[2-4]. Subsequently the genome of HCV was cloned and its nucleotide sequence determined[5] which lead to development of tests for antibody to HCV (anti-HCV) using recombinant antigen[6-11]. Since then a number of studies have been performed in hepatitis C and it is generally accepted that interferon is the most effective therapy for it. In one of the largest studies published recently by Alberti et al. [12] a high initial response of 65-70% with 6 MU thrice weekly as compared to 56-58% response with 3 MU thrice weekly was reported. The present study was done to assess the short term effects of treatment with alpha-interferon on patients with chronic hepatitis C.

Patients, Methods and Results

Two sets of patients with chronic hepatitis C were studied. Those suffering from chronic active hepatitis and those who had progressed to the stage of liver cirrhosis. Diagnosis in both the groups was confirmed by liver biopsy. A total of 27 patients were studied, out of which 22% were females and 78% males. The mean age of patients in CAll group was 37 and in cirrhosis group 47 years. Nine patients with chronic active hepatitis and 18 with compensated liver cirrhosis were included in the final analysis. Diagnosis of these patients was based on prolonged elevation of ALT, histological features of chronic hepatitis/cirrhosis and positive anti-HCV antibody. In both groups interferon alpha 2a was given subcutaneously thrice weekly for 3 months. On the basis of response determined by ALT levels, estimated monthly, patients were assigned to normalized, partially normalized and non- normalized groups. Based on me ALT levels in me CAH group, 67% patients responded to treatment with interferon alpha 2a and their mean semm ALT level which was 232 IU/L at baseline, after treatment for three months caine down to 26 lUlL. In the same gm up 22% patients did show some degree of response and their ALT levels went down from 114 IU/L at the baseline to 78 lUlL at the end of three months, however, these were not categorized as partial responders as the reduction in the ALT level was less than 50%. The remaining 11% patients failed to show an objective response. Hence according to the above account 33% were categorized as non-responders in the CAN group (Figure).



Figure

In the second group which was diagnosed as suffering from compensated cirrhosis, 56% of patients responded to treatment and their mean ALT level which was 161 lUlL at baseline normalized and went down to 39 lUlL after three months of treatment. Another 33% patients showed only a partial response and their mean ALT which was 171 lUlL at baseline went down to 85 JUL after three months but did not normalize. The remaining 11% patients failed to show any response and their mean ALT which was 116 lUIL at baseline went up to 141 lUlL at the end of three months treatment (Figure).

Comments

The short term response to treatment in both the groups was consistent with response rates reported in the literature[1,7,12]. A complete biochemical response shown by normalization of ALT in 67% patients of CAH and 56% patients of compensated cirrhosis is encouraging and inline with high initial responses reported by Alberti et al.[12]. Alberti et al. have reported a response of 65-70% with 6MU and 56-58% with 3MU thrice weekly[12]. The difference in responses between the two groups was however not significant. Thus the present study does show a comparable response rate in our population. Also based on the results obtained, it is concluded that interferon alpha 2a has a role in the treatment of chronic hepatitis C and is beneficial for patients of chronic active hepatitis as well as those who have progressed to the stage of cirrhosis. However, this report is based on the assessment of short term therapy with interferon-alpha 2a and it remains to be seen how these patients will respond to long term treatment with interferons. Further studies to determine the long term outcome of interferon treatment in local patients of chronic hepatitis C are ongoing.

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