Long term treatment of chronic hepatitis C with interferon alfa-2b: disappearance of HCV-RNA in a pilot study of eight haemophilia patients

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Abstract
This pilot study was designed to establish the effect of long term alpha interferon treatment in haemophilia patients with chronic hepatitis C virus (HCV) infection, with particular reference to prevention of long term complications of HCV infection (that is, cirrhosis) and effect on HCV viraemia.

Patients and methods
Patients were included in the trial if they had haemophilia A or B and chronic hepatitis C, with serum alanine aminotransferase (ALT) activities greater than 2-5 times the upper limit of normal on at least two occasions within six months and serum HCV-RNA detectable by cDNA polymerase chain reaction (PCR) testing.

All eight patients received subcutaneous interferon alfa-2b in a reducing dose for 24 weeks, according to the following schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>ALT 2.5 MU daily</th>
<th>ALT 5 MU daily</th>
<th>ALT 2.5 MU TW</th>
<th>ALT 5 MU TW</th>
<th>ALT 5 MU</th>
<th>ALT 2.5 MU</th>
</tr>
</thead>
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<tr>
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<td>51</td>
<td>47</td>
<td>38</td>
<td>39</td>
<td>17</td>
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<tr>
<td>2</td>
<td>112 +</td>
<td>32</td>
<td>24</td>
<td>51</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>123 +</td>
<td>40</td>
<td>27</td>
<td>15</td>
<td>13</td>
<td>45</td>
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<tr>
<td>4</td>
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<td>825</td>
<td>233</td>
<td>203</td>
<td>330</td>
<td>160</td>
</tr>
</tbody>
</table>

*Patients 1, 2, 3, and 8 stopped treatment. Patients 4, 5, 6, and 7 received IFN 5 MU three times weekly for the remainder of the study.
*Stopped interferon after two weeks.
*Stopped interferon after two weeks.
*Patient refused further treatment after week 24.
*NT Not tested.
however, (patient 3) showed a complete ALT normalisation at week 24.

Even in complete responders, ALT fluctuation above the upper limit of normal, not accompanied by renewed HCV-RNA detection, was seen and is difficult to explain.

Conclusions
From the results of this study, we conclude that HCV-RNA detection by cDNA-PCR is a better criterion for relapse than serum ALT measurement. Current interferon alpha treatment schedules for patients with chronic hepatitis C are based on the ALT response and should be critically re-evaluated for their ability to clear HCV-RNA.


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