there is a basis for a large trial in a population proposed by the correspondents. Our paper was also published to give hints on how to plan it and on its potential (large) sample size.

Conflict of interest statement. None declared.

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Treatment of chronic hepatitis C in haemodialysis patients requires more ribavirin

Sir,

In a recent issue, Van Leusen et al. described a series of seven haemodialysis patients with chronic hepatitis C (HCV) who were treated with peginterferon alfa-2a (Pegasys®) and ribavirin (Copegus®), which resulted in sustained virological response (SVR) in five patients (71.5%) [1]. Despite their encouraging results, we think that higher ribavirin dosages would further boost SVR.

The authors report that their patient 1 did not respond to combination treatment of 135 µg peginterferon alfa-2a once a week and ribavirin 100–300 mg/day. We offered retreatment to this 39-year-old male. He was infected with HCV genotype 1b and had a low viral load (100 000 IU/ml). We started him on peginterferon alfa-2b (Pegintron® 150 µg) and ribavirin (Rebetol®) 400 mg/day. Within 2 weeks his plasma ribavirin levels reached 17.1 µg/ml. We therefore reduced ribavirin to 200 mg/day alternating with 400 mg/day. After 6 weeks ribavirin levels were 6.5 µg/ml, and dosage was maintained. Darbepoetin alfa dosage was increased from 20 µg to 150 µg/week. Haemoglobin decreased to 6.4 mmol/l at Week 12 and reached a nadir of 4.9 mmol/l after 28 weeks, but did not decrease further. Treatment was well tolerated and dose reduction or discontinuation due to adverse events was not needed. HCV RNA levels were undetectable after 8 weeks and he reached SVR. He received a renal transplant 1 year later.

HCV treatment in haemodialysis patients is crucial as these patients have a higher risk of developing cirrhosis and hepatocellular carcinoma. Timing of treatment is critical and needs to be performed prior to kidney transplantation as interferon can promote graft dysfunction [2]. Therefore, combination therapy should be considered in all HCV-infected ESRD patients.

Ribavirin is an essential component of HCV combination treatment and increases the SVR rates from 37% to 60% compared to interferon monotherapy [3]. Toxicity, especially haemolytic anaemia, adds a layer of complexity. This led some authors to suggest that ribavirin is contraindicated in ESRD patients because of the risk of ‘life-threatening’ haemolysis [2]. Our data and those of Van Leusen et al. suggest that ribavirin does not lead to uncontrollable haemolysis [1]. This corroborates with a recent study on 35 haemodialyzed HCV patients who were treated with peginterferon alpha-2a (135 µg weekly) and ribavirin 200 mg/day. A total of 26 patients developed severe anaemia and one patient uncontrolled anaemia (Hb 3.27 mmol/l) that led to treatment discontinuation, while the others required an increase of erythropoietin-alfa. This regimen was successful in 15 patients, while ribavirin was reduced to 200 mg every 2 days in 11 patients. SVR was reached in 97% [4].

From these data it appears that higher ribavirin plasma concentration increases the chance of viral clearance. In the study of Van Leusen et al., ribavirin was kept at a relatively low level (1.5–2.5 µg/ml) [1] while in our (successfully treated) case we reached at considerably higher levels, as in the 11 patients that necessitated ribavirin dose reductions plasma concentrations were 5.7 ± 1.5 µg/ml [4].

These considerations led to a Dutch nation-wide randomized controlled clinical trial that aims to compare the current standard therapy with a regimen that includes double dosage of ribavirin in naïve HCV genotype one and four patients [5].

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Reply

Sir,

We appreciate the interest shown in our publication by Slavenburg and Drenth and we share their opinion that a higher ribavirin (RBV) dose in combination with pegylated interferon (IFN) will lead to a better sustained response in the treatment of chronic hepatitis C in haemodialysis