

Case report

The tale of an unexpected SVR

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SUMMARY

A case of a “difficult to treat” patient with chronic hepatitis C is presented, who experienced multiple problems, leading to significant drug reductions or discontinuations. Nevertheless, after an initial response, ribavirin monotherapy for a significant period proved to be an important factor in achieving sustained virological response.

Key words: Ribavirin, Drug side effects, Hepatitis C

CASE DETAILS

A 32 year old gentleman was found positive for HCV at blood donation back in 1993. Following a liver biopsy, he received a 6 months course of Interferon- α (3MU trice weekly) without response. A second course of 12 months’ treatment (Interferon- α plus Ursodeoxycholic acid in the context of a clinical trial) was also unsuccessful. He did not receive any further treatment (apart for his well-controlled hypertension, captopril/hydrochlorothiazide and atenolol) until 2006. A new liver biopsy revealed an Ishak stage 3 and grade 6 score and a viral load $>7 \times 10^5$ IU/ml (Cobas Amplicor HCV test, version 2.0, Roche, NJ-UISA) and genotype 1a (Inno-LiPA HCV II, Innogenetics, Belgium). By another physician he was started on PEG-Interferon $\alpha 2a$ 180 μ g (PEG-IFN $\alpha 2a$) and Ribavirin 1200 mg as appropriate. Two months later the treatment was improperly discontinued—for 45 days—because of decreased white cell count (WBC:2000/ μ L with 1200 neutrophils); at that time HCV RNA was undetectable.

He was then referred in our clinic and restarted at a full dose of the same regimen (WBC: 3000/ μ L) without major side effects. Three months later a reduction on ribavirin to 600 mg was made because of Haemoglobin 9.6g/dl with PEG-IFN dose stable and subsequent clinical improvement (PCR negative). One month later PEG-IFN was discontinued because of blurred vision with haziness of left optic disk in fundoscopy. Further investigation with MRI and visual field examination were not indicative of a pathologic process: this symptom gradually improved after PEG-IFN discontinuation and returned to normal. The patient was left only on half-dose ribavirin which, when his clinical and laboratory status permitted, went up to a full dose up to 48 weeks since the initiation of PEG/ribavirin treatment. HCV-RNA was negative at the end of treatment (ETR) and most importantly 6 months after ETR, he had achieved a sustained virological response (SVR), was in good general health and without signs of liver disease.

DISCUSSION

Current therapy with Pegylated Interferon- α and ribavirin for chronic HCV provides an overall SVR of 40-50% among patients with genotype 1,¹ if they receive full treatment. This patient’s case is challenging for many reasons. He was a non-responder (genotype 1a) after two courses of treatment at the initial era of Interferon- α . Non-responders are considered a difficult treatment group, where a 20% increase in response rate is expected using a more potent drug combination.² Expectations for response to re-treatment are lower, among others, in patients with genotype 1 and high baseline RNA levels.

During his treatment period several events could have inversely affected the outcome, such as the inappropriate discontinuation for his level of neutropenia, which is common in IFN-treated patients and rarely related to the risk of infection, even with absolute neutrophil count <500 /mm³.^{2,3} This patient also experienced a drop in Haemo-

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globin and had related fatigue, but reducing the ribavirin dose was tolerable and erythropoietin was not used. Importantly, he developed visual disturbances during treatment which required PEG-IFN discontinuation. Nevertheless, despite cessation of the first drug and half dose of the second for a significant time period, this patient who had an early virological response (12 weeks' PCR negative) did achieve ETR and SVR. The continued ribavirin monotherapy proved a viable option and helped the patient to sustain the initial response.⁴

This case indicates that continuation of ribavirin treatment after an early response might be effective in achieving SVR even after discontinuation of PEG-IFN. Efforts should be made to achieve viral clearance even in the presence of side effects which require vigilant clinical care,

while divergence from established dose schemes does not preclude failure.

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