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SVR and quality of life: A post-treatment assessment.

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Introduction

The advent of direct-acting antivirals (DAAs) has transformed hepatitis C virus (HCV) treatment, offering cure rates exceeding 95%. The clinical benchmark for cure is Sustained Virologic Response (SVR)—defined as undetectable HCV RNA 12 to 24 weeks after completing therapy. While SVR marks viral eradication, its impact extends beyond clinical metrics. Increasingly, researchers and clinicians are examining how SVR influences health-related quality of life (HRQoL), a multidimensional measure encompassing physical, emotional, and social well-being [1 2].

SVR is more than a virologic milestone—it's a gateway to improved health outcomes. Achieving SVR reduces the risk of liver-related complications such as cirrhosis and hepatocellular carcinoma, and it improves overall survival. But for patients, the journey doesn't end with viral clearance. The post-treatment phase often brings questions about fatigue, mental health, stigma, and reintegration into daily life [3, 4].

HRQoL is typically assessed using validated tools such as: Measures mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Evaluates physical and mental health across eight domains. Tailored for HCV patients, assessing emotional, cognitive, and social dimensions. These instruments help quantify the subjective benefits of SVR, offering insights into patient-reported outcomes (PROs). Several studies have explored the relationship between SVR and HRQoL: A prospective national study in China found that SVR significantly improved EQ-5D utility and visual analog scale (VAS) scores over time. Sociodemographic factors like age, income, and genotype influenced outcomes [5, 6].

In Japan, a retrospective study of 1,546 patients showed HRQoL improvements post-SVR, especially among older adults treated with interferon-based regimens. An Egyptian cohort revealed significant gains in physical health, emotional well-being, and cognitive function after DAA therapy, with variations based on gender and comorbidities. These findings underscore that SVR leads to measurable improvements in HRQoL, though the extent varies across populations. HCV is often associated with stigma, anxiety, and depression. Achieving SVR can alleviate these burdens: Patients report feeling less anxious about disease progression and transmission. Viral clearance enhances self-image and social confidence [7, 8].

Lower depression scores: Studies show a decline in depressive symptoms post-SVR, especially among patients with prior psychiatric comorbidities. However, some patients continue to experience psychological distress, highlighting the need for post-treatment counseling and support. One of the most common symptoms of chronic HCV, fatigue often improves after treatment. ALT and AST levels normalize, and fibrosis progression slows. Patients report better sleep quality and nutritional intake post-SVR. HCV carries a social stigma, particularly among people who inject drugs (PWID). SVR can facilitate: Patients feel more confident returning to employment and social activities. Viral clearance helps dispel misconceptions and reduce social isolation [9, 10].

Conclusion

As global efforts to eliminate HCV intensify, SVR will become increasingly common. But viral eradication is only part of the story. Enhancing quality of life post-treatment requires a holistic

approach—one that integrates medical, psychological, and social support.

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