

Contagiousness of Hepatitis C: A Multifaceted Systemic Disorder with Health, Patient-Reported and Economic Ramifications

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Abstract

About 170-200 million people worldwide are infected by Hepatitis C Virus infection (HCV). HCV is one of the main causes of cirrhosis and Hepatocellular Carcinoma (HCC) and has been established in most Western countries as the leading indication for liver transplantation. It is necessary for healthcare practitioners to consider the detailed and multi-faceted image of this disease since HCV is a chronic disease with hepatic, extrahepatic, economic and patient-reported effects. In this sense, the influence of HCV on the particular patient and the community must be thoroughly understood. The long-standing target of eradicating HCV in most affected patients has been reached with the recent introduction of the latest wave of direct antiviral medications. Therefore, evaluating the cumulative benefits of continuous virological reaction in a systematic way is more important now than ever. This should not be limited to the therapeutic effects of treating HCV, but should also be taken into consideration in improving the health and economic results of treating HCV identified by patients. It is only by this holistic approach to HCV and its management that we can grasp the true effect of this disease and the enormous progress made with the current antiviral regimens.

Keywords: Hepatocellular Carcinoma; Hepatitis C Virus Infection (HCV); Genotype

Introduction

In 1989, the discovery of the Hepatitis C Virus (HCV) resulted in years of research attempts to classify one of the most complex causes of chronic liver disease.[1,2] In the following decades, after the identification of HCV, efforts centred on diagnosing HCV infection correctly, quantifying the volume of virus in the blood, assessing HCV genotypes, and clarifying the natural history of chronic HCV infection.[3-8] The overall burden of HCV infections can now be reliably measured worldwide as a result of these developments.[4] There is also clear evidence that HCV (especially in Western countries and Japan) is one of the main causes of Hepatocellular Carcinoma (HCC) and has become the leading predictor of liver transplantation.[4,8,9]

We also recognise globally that Genotype 1 (GT1) is the most widespread (46%) genotype of HCV found in the United States, Europe, Australia, and Japan with a predominant regional dispersion. The second most prevalent (22 per cent) genotype found mainly in Pakistan is Genotype 3 (GT3). In addition,

Genotype 4 (GT4.13%) is mainly present in Egypt and North Africa.[4,10]

Interferon (IFN)-based regimens became the initial therapy for HCV. However, with only 10% of qualifying patients in the Western world willing to access medication, the success of these regimens was poor.[11]

Subsequent advancements in the treatment of HCV have fused IFN with Ribavirin (RBV) and consequently protease inhibitors of the first generation. In clinical trials, these regimens resulted in higher rates of Sustained Virologic Response (SVR) but were associated with elevated side effects due to a discrepancy between clinical trial efficacy rates and SVR efficacy rates reported from real-world practise. [12]

To evaluate the overall burden of HCV infection in parallel with the creation of highly successful treatment regimens, a systematic approach is now required.

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Conclusion

A multi-faceted systemic disease with a major clinical, PRO, and economic burden is HCV infection. To best appreciate its impact on the patient and community, it is important that the entire scope of the disease burden of HCV be analysed. In addition, it is also critical that HCV treatment regimens are also reviewed in a thorough way. In order to best serve patients and society, this strategy would allow patients, health care professionals and policy makers to make better informed decisions about this critical illness and its treatment. Nevertheless, there are also a range of problems in the management of HCV patients that focus on the detection, connection to care, and treatment of these highly successful drug regimens.

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