Hepatitis C therapy: History, standard of care and future directions

Chronic hepatitis C infection, which is estimated to infect 170 million persons worldwide, has undergone a rapid evolution in therapy. The goal of treatment is to achieve a sustained virologic response or SVR which has been associated with histologic regression of hepatic fibrosis, improved liver-related mortality and diminished overall mortality. For more than a decade, the standard therapy for genotype-1, the most common worldwide isolate, was peg-interferon and ribavirin which achieved at best an SVR rate of 45% but was fraught with a multitude of side effects and usually required 48 weeks of treatment. The past few years has seen the near elimination of interferon and the advent of direct acting antiviral agents including NS3-4A protease inhibitors, NS5a inhibitors and nucleotide and non-nucleotide NS5b polymerase inhibitors, that when used in combination, achieve greater than 90% SVR routinely, even in populations that had been heretofore considered difficult to treat. The duration of treatment ranges from 8 to 24 weeks and therapy is much easier to tolerate, relative to interferon-containing regimens of the recent past. The major limitation of these contemporary regimens is the cost, although medico-economic models have shown them to be cost-effective. Future antiviral regimens for hepatitis C are expected to be active across all genotypes (pangenotypic) and may require as little as six weeks of therapy.

Biography

Brian L Pearlman serves as Medical Director for the Center for Hepatitis C at Atlanta Medical Center in Atlanta, Georgia. He is Professor of Medicine at both the Medical College of Georgia and Emory School of Medicine. He completed his Undergraduate and Medical degree at University of Miami, Florida and his Post-graduate training at the University of Texas, Southwestern and Baylor Medical Center, both in Texas. He is widely published in clinical journals including The Lancet, Gastroenterology, Hepatology, Clinical Infectious Disease and Lancet Infectious Disease. He is active in both patient care and teaching physicians and has been the recipient of numerous teaching awards. He is also an active investigator in hepatitis-C related research.

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