

HCV between Developed and Underdeveloped Countries

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Hepatitis C is an infectious disease affecting primarily the liver, caused by the hepatitis C virus (HCV) [1]. HCV infection is a major problem in Egypt. Egypt has the highest prevalence of the Hepatitis C virus (HCV) in the world, with 14 percent of the population infected and 11.8 million patients, according to the World Health Organization. Every year there are 170,000 - 200,000 new HVC cases in Egypt. It was first discovered in 1989. The hepatitis C virus (HCV) is a small, enveloped, single-stranded, positive-sense RNA virus [2]. It is a member of the Hepacivirus genus in the family Flaviviridae. There are seven major genotypes of HCV, which are known as genotypes one to seven. It is transmitted by injection which means spread primarily by blood-to-blood contact associated with intravenous drug use, poorly-sterilized medical equipment, and transfusions.

Because Egypt is also endemic with Schistosomiasis, it was thought that treatment with tartar emetic was the principal cause of wide spread infection with HCV as sharing of syringes was done in a wide scale.

Since the start of HCV discovery there are terror of it, not only for its effect on the liver as it causes chronic active hepatitis, cirrhosis will go on to develop liver failure, liver cancer but also because of its effect on refusal of immigration between countries of Middle East with huge economic burden as a consequence.

HCV patients tried any treatment prescribed by doctors or others to get rid of it without any scientific basis, like probiotics, milk and urine of camels, black pills, milk thistle, ginseng, and colloidal silver [3]. Moreover, Ozone was tried. But all proved to be ineffective.

Alpha-interferon given every other day proved, as well, to be ineffective because the preparation of alpha interferon was against HCV genotype I while that found in Egypt is genotype IV. So it is supplemented by ribavirin as an antiviral working against mRNA, but the percentage of cure was limited and a high rate of recurrence occurred. Then treatment consists of a combination of PEGylated interferon alpha and the antiviral drug ribavirin for a period of 24 or 48 weeks, appear to be effective with more than 70% cure but still there are a rate of recurrence [4].

Recently a new drug appeared and is thought to have high rate of cure. The new Hepatitis C drug called Sofosbuvir. Sofosbuvir - commercial name Sovaldi was approved in the United States in December 2013 and was introduced in Egypt on 16 October 2014. The Government took the opportunity to offer it to HCV cases because of its perceived magic role in the elimination of HCV. However, it was found out that it must be taken in combination with other drugs either as dual treatment (Sovaldi + Ribavirin) or triple combination (Sovaldi + alpha interferon + Ribavirin). So still the major problem which is high cost of treatment. Government tried to produce locally but failed to reduce the cost. Because the new drug still recent the fear of recurrence make it hard to judge the effectiveness of the new drug.

Bibliography

1. Ryan KJ and Ray CG. "Sherris Medical Microbiology". 4th edn McGraw Hill (2004): 551-552.
2. Ray SC and Thomas DL. "Chapter 154: Hepatitis C". In Mandell GL, *et al.* "Mandell, Douglas and Bennett's principles and practice of infectious diseases. 7th edn. Philadelphia, PA (2009): Churchill Livingstone.
3. Hepatitis C and CAM: "What the Science Says". *National Center for Complementary and Alternative Medicine* (2011).
4. Liang TJ and Ghany MG. "Current and future therapies for hepatitis C virus infection". *The New England Journal of Medicine* 368.20 (2013): 1907-1917.

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