WHATS NEW IN HEPATOLOGY (HEPATITIS C)

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WHATS NEW IN.....

I vividly remember one of my lecturers referring to Hepatitis C as the "Real Millennium Bug"! Why might you ask? Well, it is estimated that between 170-210million people are affected worldwide and the issues surrounding the mode of transmission (i.e. blood born) and the majority of people affected being those who have shared intravenous needles means that it is difficult to diagnose and also difficult to maintain a steady treatment plan. Moreover, there are the implications of the clinical sequalae of chronicity of liver disease and the morbidity associated with this. We simply aren't diagnosing enough.

However, we are now approaching the most exciting and important breakthroughs in treatment for chronic hepatitis C. Since the discovery of the virus in 1989 there has been battle after battle to treat the virus with varying success. We now know that there are multiple genotypes (6 plus subtypes) of the virus some with a higher cure rate (sustained viral response (SVR)) from treatment than others. Up until now, genotype 1 has been considerably more challenging to treat with standard therapy that includes Ribavirin orally and PEG-Interferon parenterally. Collectively genotypes 1-6 have achieved an SVR in up to 80% of patients treated, however, this figure has been 40-50% on average for genotype 1.[1] This is still an improvement on initial monotherapy with Interferon with response rates of less than 10% for genotype 1 and 30% for 2 and 3.[1]

Problems as well as the lower response rates to treatment include the longer treatment duration (48 vs 24 weeks) as well as the side effects that patients have to endure for a longer period, especially from Interferon whereby patients develop symptoms of the flu every week.[1] It is now that things are beginning to progress. Protease inhibitors have recently been licensed for the use in treatment of chronic HCV revolutionising genotype 1 therapy.[1] From a meagre 40% SVR to reports in the most recent studies up to 85%. On the cautious side, every new 'wonder drug' always comes with a drawback. The trade-off is the side effect profile that, in itself is not much different to the existing standard therapy but seems to compound the severity. Perhaps every clinician's greatest fear is that of the potential of these directly acting antivirals to cause the development of drug resistance in those who are not going to respond to current available treatment, meaning there is nowhere else to turn, no other trick up our sleeves. Despite knowledge of this virus for over 20 years now, cure rates have not been satisfactory. One of the biggest problems with such therapy is compliance. Compound that with the genotype 1 being more difficult to cure and therefore longer treatment duration this could still lead to problems with triple therapy. Drugs currently in phase III trials are oral therapy only, not requiring the weekly dose of the 'flu from PEG Interferon. Some of these are also reporting much higher and more rapid viral response too.

The future is certainly looking up in the battle against Hepatitis C, and it is rapidly gaining momentum with drug companies desperate to have the most effective, tolerable drugs to treat the condition in a rapidly evolving field. This is, of course, only part of the story. To deliver the most effective treatments and to save lives from later complications, we have to target the right population to come forward for testing. With still rather gruelling treatment regimens requiring considerable dedication from the patients, selection of those receiving therapy is also vital for success.

Reference

1- Mukherjee S (2012). Hepatitis C. Emedicine Online. Available from:- http://emedicine.medscape.com/article/177792-overview [Cited 7th May]