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AASLD 2016 summary abstract

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Short review on most exciting advances in viral hepatitis diagnosis extracted from abstracts submitted to forthcoming AASLD event. The most prominent being role of HCV core antigen detection and quantification as new tool for detection and monitoring of viremic patient and as an more economical alternative to NAT or HCV RNA quantification. We also review abstracts about creation of novel web-based tool kits and APPs that encourage people to test and get linked to care.)

In this article we review abstracts related to viral hepatitis diagnostics submitted to AASLD 2016.

In a new review by Polaris Observatory global prevalence of hepatitis C was investigated.

The global prevalence was estimated by using regional averages for countries without data. Approximately 70 (56-90) million individuals were estimated to experience viremic HCV infection. This is lower than 2014 published estimates due to more recent (lower) prevalence estimates in African countries and a large increase in treatment. Lower estimates can also be attributed to an increase in mortality due to liver-related causes and an aging population. In 2015 alone, approximately 500 thousand individuals were treated and cured. The largest increase in treatment was in the United States (260K treated in 2015) followed by Egypt (190K) and the European Union (135K). Although this increase in treatment is a substantial step towards reducing the global burden of liver related deaths, the current treatment rate is not sufficient to achieve elimination by 2030.

One of the highlights of 2016 in terms of viral hepatitis diagnostics is use of HCV core antigen as a surrogate marker for detection of viremic patients.

Recently WHO guidelines indicated that well-performing HCVcAg tests with an analytic sensitivity reaching into the femtomolar range (equal to 3000 IU/mL) could replace NAT for HCV detection, particularly if a lower cost per test allows more patients to be served.

The extent in which we can utilise the core antigen detection does not only limits to case detection. In a new study scientists hint of using core antigen detection/quantification as simplified treatment monitoring tool among those with recent Hepatitis C virus infection, including for post-treatment relapse. Although there is need for further evaluations in order to prove this matter.

This year several papers were published about cost effectiveness for HCV screening. The interesting finding in France was that screening of men in age of 40-80 was more effective than screening men in age 18-60. Although the testing itself is considered very costly, but screening the public seems to be cost effective at the end.

The use of mobile testing units does work in case of reaching out to some populations including drug users. This is new useful tool to screen, diagnose and treat these patients by outside pathway of care.

Creation of innovative web-based tool kits including Hep-Cure is a new trend for helping healthcare providers to reach out and encourage patients to test with improved chances for linkage to care subsequently. We expect more of these web-based tools and APPs to come into market during next year. These tools are particularly of interest in resource limited setting where the infrastructure is limited.

There are other APPs which does help with self-testing or home testing linking the patients to counselling and treatment clinics.

As for HBV, a novel ultra-sensitive method (ICT-CLEIA) for detection of HBsAg has been discovered. This method can help with diagnosis and monitoring of hepatitis B reactivation. ICT-CLEIA is a novel assay for HBV monitoring to prevent hepatitis caused by HBV reactivation.

[Short summary of selected abstracts in viral hepatitis diagnostics, AASLD 2016 PDF](#)

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