ADVANCES IN HEPATOLOGY

Current Developments in the Treatment of Hepatitis and Hepatobiliary Disease

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Current Issues Involving Screening for Hepatitis C Virus Infection

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G&H What is the prevalence of hepatitis C virus infection in the United States?

DD According to the Centers for Disease Control and Prevention (CDC), approximately 2 to 3 million individuals in the United States have been diagnosed with chronic hepatitis C virus (HCV) infection. However, it is suspected that the actual number of HCV cases is even higher, as many individuals infected with HCV are unaware of their status.

G&H What are the current guidelines for HCV screening?

DD The latest guidelines from the CDC, which were released in 2012, have been adopted by the US Preventive Services Task Force. These guidelines recommend that all individuals born between 1945 and 1965 (ie, the baby boomer generation) be screened for HCV infection at least once.

In addition, it is now New York State law (effective as of January 2014) that hospitals and health service providers offer an HCV screening test once to every patient born between 1945 and 1965. This law encompasses all inpatient services at hospitals as well as all primary care services offered through hospital outpatient clinics or by physicians (including primary care physicians and obstetricians/gynecologists), physician assistants, and nurse practitioners in any medical setting. Emergency departments and ambulatory surgery centers are not included, although they are encouraged to offer testing as well. It should be noted that HCV testing itself is not required; only the offer to test these patients is required. Several other states, such as Connecticut and Massachusetts, have similar laws.

G&H Why was birth cohort screening implemented for HCV infection?

DD Approximately three-fourths of US patients with HCV infection were born between 1945 and 1965, so focusing on this birth cohort makes the process of identifying patients with the disease easier. When screening patients in the past, clinicians would have to go through a long list of risk factors, which includes blood transfusions or organ transplants before 1992, being born in a country with a high endemicity to HCV infection (eg, Egypt, Mongolia, Pakistan), injection drug use, tattoos, body piercings, chronic hemodialysis, HIV infection, an HCV-positive mother, and multiple sexually transmitted infections. Some of these risk factors involve information that people would prefer not to discuss. For birth cohort screening, all that a clinician needs to do is find out when a patient was born.

G&H Since there is such an emphasis on birth cohort screening for HCV infection, is screening of non–baby boomers being performed less frequently than before?

DD Any patient with identifiable risk factors or abnormal liver enzymes should still be screened as well; despite

the CDC call for baby boomer screening, the screening rates for non–baby boomers should not decrease at all. Although it is certainly important to focus on the baby boomer birth cohort, as it is a major source of HCV cases, clinicians should not forget that the disease can also develop in other patients and that the incidence of the disease in particular patient groups can even change over time. For example, there has recently been an epidemic of HCV infection among individuals in their teens and 20s in the United States, particularly in the Northeast, because of a sharp increase in heroin use in that age group due to the decreasing cost of the drug. At the moment, there is no targeted screening of this age group, but this new epidemic should be kept in mind when seeing patients.

G&H Has birth cohort screening actually had an impact on the number of people being screened and diagnosed with HCV infection?

DD Screening rates for HCV infection have definitely increased. For example, even in emergency rooms, screening baby boomers has resulted in a prevalence of HCV of 8% to 10% in Birmingham, Alabama; Baltimore, Maryland; and Philadelphia, Pennsylvania.

G&H What have been the most common barriers associated with HCV screening?

DD In the past, one of the most common barriers for HCV screening was fear of a positive test result. People did not want to know if they were infected with HCV because treatment was so difficult. Now, with the recent development of more effective and shorter-duration drug regimens, some of which only need to be taken once daily, treatment of HCV infection, particularly of genotype 1, has become much easier and is not scaring off so many people.

Other common barriers include reluctance of patients to disclose certain information to their physician, as mentioned above, insufficient time and/or access to medical care/testing, cost, and lack of knowledge of testing.

G&H How well do physicians and nurses adhere to the screening guidelines?

DD At the moment, the best adherence we have seen is approximately 20%. Reasons commonly given for this low rate are lack of time and the reluctance to be responsible for following up. There are several large funded projects currently ongoing that are looking at the effects of having a navigator to link patients to care after they test positive for HCV infection.

G&H What methods have been examined for the implementation of birth cohort screening?

DD My colleagues and I have examined a combination of methods, including educational intervention, data feedback, and the use of electronic medical record (EMR) flags (which are included as part of a nursing admission checklist). We presented some of these findings at this year's Digestive Disease Week. Before the use of EMR flags, approximately 35% o f eligible inpatients underwent HCV screening. After the implementation of these flags, the number of patients who were screened for HCV infection rose, although this increase was not sustained. The overall rate for HCV screening did not change even with data feedback to nursing managers and teaching sessions for nurses.

G&H Has there been research examining whether the use of physicians vs nurses or nonphysicians first can increase the rate of HCV screening?

DD In the experience of my colleagues and I, the HCV screening currently being offered is usually now part of nursing order sets, and these guidelines are much more likely to be followed by nurses than doctors.

G&H What is the ultimate goal of a screening program for HCV infection?

DD The ultimate goal is actually not the screening itself; the goal is to link patients who have positive test results to appropriate medical care. Unfortunately, this link is a significant challenge. It requires a lot of extra effort.

G&H How can linkage to care be improved?

DD The answer is to hire patient navigators, particularly ones who can communicate with patients who do not speak English, to steer patients with positive test results to appropriate care and follow-up. However, hiring patient navigators costs money in a time when many hospitals are tightening their budgets.

G&H What are the next steps in research?

DD More research is needed to find effective ways to increase the rate of screening. My colleagues and I are currently conducting a clinical trial on emergency room screening for HCV infection, as some studies have suggested that screening in this setting occurs at a lower rate than in the outpatient setting.

Currently, there are also several intriguing studies going on in this area, such as Project INSPIRE NYC

(Innovate & Network to Stop HCV & Prevent Complications Via Integrating Care, Responding to Needs, and Engaging Patients & Providers), which my colleagues and I are conducting. The goals of this project are to better identify patients with HCV infection using surveillance databases and community referrals while providing treatment for the disease itself as well as counseling for mental health and substance abuse, with the ultimate aim of providing better care and reducing HCV-related complications and hospitalizations. My colleagues and I also have a trial focusing on the follow-up of patients with positive HCV test results.

Dr Dieterich has served as a consultant to Gilead, BMS, AbbVie, Janssen, and Merck.

Suggested Reading

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