Editorial

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Hepatocellular Carcinoma—Implications for the VA

Every health care provider treating patients with liver disease can attest to a noticeable increase in the number of patients with hepatocellular carcinoma (HCC) in recent years. Unfortunately, current data indicate that the number of these patients in our clinics will continue to increase in the near future. This is due primarily to the large number of patients with chronic hepatitis C virus (HCV) infection in the VA health care system.

According to the VA National Hepatitis C Registry, 207,798 veterans were diagnosed with chronic HCV infection as of 2007.[1] The average age of these patients was 56.4 years,[1] and the average duration of infection could be estimated to be between 28 and 29 years.[2,3] Given that the median duration of infection to the development of cirrhosis is 30 years,[4] and that veterans, in general, are at increased risk for fibrosis (due to a high likelihood of being male, having a high body weight, and engaging in alcohol and tobacco use), we can continue to expect an increase in the total number of VA patients with cirrhosis as the HCV patient population ages. Already, results of recent biopsy studies of patients with HCV at VA medical centers have indicated rates of stage 3 fibrosis (severe) of 13% to 18.5% and rates of stage 4 fibrosis (cirrhosis) of 12% to 15.6%.[2,3,5]

Of the patients in the VA National Hepatitis C Registry who were receiving care from the VHA in 2007, 18,990 (9.1%) had received a diagnosis of cirrhosis, and 2,031 (1%) had been diagnosed with HCC and were still living.[1] Conservatively, we can expect those patients with HCV and cirrhosis to develop HCC at a rate of 1% to 4% per year,[6] which means that, nationwide, the number of patients with HCC in the VA system will increase by anywhere from 190 to 760 patients per year. And this estimate does not include the large numbers of patients with undiagnosed cirrhosis and those whom we can expect to develop HCC from liver disease or cirrhosis resulting from conditions other than HCV infection—such as chronic hepatitis B virus (HBV) infection, alcohol abuse, and nonalcoholic steatohepatitis.

Recent data,[7,8] along with prior research,[6] strongly suggest that eradication of HCV may result in a marked reduction in the rate of HCC development and overall mortality from liver disease, particularly in patients who have early cirrhosis and demonstrate reversal of fibrosis on liver biopsy following a sustained virologic response.[9] Since the majority of patients with chronic HCV infection in the VA never have received antiviral therapy,[10,11] emphasis should be placed on expanding the number of veterans who can achieve safe and effective antiviral therapy now. Waiting until patients develop severe fibrosis or cirrhosis before starting antiviral therapy can be counterproductive, since patients with advanced fibrosis do not respond as well as those with earlier-stage disease to antiviral treatments. Patient education programs and efforts to implement a collaborative or integrated clinic with mental health providers may help to increase the number of patients who receive therapy.[11] Hopefully, more data supporting these approaches will become available, which, in turn, will support large-scale implementation efforts.

When treating patients with liver disease, it is important to provide optimal medical care, including recommedations and support for lifestyle modifications that can improve risk factors for fibrosis progression. If a patient has HCV cirrhosis or chronic HBV infection, regular screening for HCC is imperative. If HCC is diagnosed, there are increasing options for effective treatment, including liver transplantation, local therapies, and systemic therapies. This means that HCC care is best provided by a collaborative team, involving the disciplines of gastroenterology and hepatology, radiology, surgery, and oncology.

FUTURE ACTION

Due to the increase in HCC cases we can expect, the VA has an opportunity to continue to discover and support best practices related to cirrhosis care and HCC screening and treatment. Many questions should be addressed, such as the most appropriate and cost-effective method of HCC screening in VA patients, markers and risk factors for HCC, effective methods for chemoprevention, the most efficient methods for collaborative HCC care, "best practices" for improving quality of care for patients with chronic liver disease, and ongoing clinical trials to improve actual HCC treatments. In this regard, the VA has many resources for both frontline caregivers and clinical researchers interested in HCC and chronic liver disease. These include the Hepatitis C Resource Center program (http://www.hepatitis.va.gov), which is a source for "best practice" information and training regarding HCV, cirrhosis, and HCC; the Health Services Research and Development program (http://www.hsrd.research.va.gov); and the HIV/Hepatitis Quality

Continued on page 24

Continued from page 14

Enhancement Research Initiative (QUERI) program (http://www.queri.research.va.gov/hiv/default.cfm), which supports research and quality improvement efforts related to these issues of growing concern. ●

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