Hepatobiliary Malignancies

Risk of hepatocellular carcinoma after sustained virological response in Veterans with hepatitis C virus infection

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Abstract

The long-term prognosis in terms of risk or predictors of developing hepatocellular carcinoma (HCC) among patients with sustained virological response (SVR) remains unclear. We conducted a retrospective cohort study using data from the Veterans Affairs VA hepatitis C virus (HCV) Clinical Case Registry in patients with positive HCV RNA between October 1999 and August 2009 and follow-up through December 2010. HCV treatment (interferon with or without ribavirin) and SVR (RNA test negative at least 12 weeks after the end of treatment) were determined. We used Cox’s proportional hazards models to calculate hazard ratios (HRs) for potential predictors (demographic, virological, and clinical) associated with HCC development post-SVR. We identified 33,005 HCV-infected individuals who received treatment, of whom 10,817 achieved SVR. Among these patients,
100 developed new HCC during a total follow-up of 30,562 person-years for an overall incidence rate of 0.33% per year. Annual risk of HCC remained considerably high among patients with cirrhosis (1.39%) and those cured after age 64 (0.95%). Patients with diabetes (adjusted HR = 1.88; 1.21-2.91) or genotype 3 infection (adjusted HR = 1.62; 0.96-2.734) were significantly more likely to develop HCC. **Conclusions**: Risk of HCC after HCV cure, though considerably reduced, remains relatively high at 0.33% per year. Older age and/or presence of cirrhosis at the time of SVR are associated with a high enough risk to warrant surveillance. Diabetes is also a risk factor for post-SVR HCC. (Hepatology 2016;64:130–137)

**Citing Literature**

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<th>Fabio Conti, Federica Buonfiglioli, Alessandra Scuteri, Cristina Crespi, Luigi Bolondi, Paolo Caraceni, Francesco Giuseppe Foschi, Marco Lenzi, Giuseppe Mazzella, Gabriella Verucchi, Pietro Andreone, Stefano Brillanti, Early Occurrence and Recurrence of Hepatocellular Carcinoma in HCV-related Cirrhosis Treated with Direct Acting Antivirals, <em>Journal of Hepatology</em>, 2016</th>
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<td>Che C. Colpitts, Joachim Lupberger, Thomas F. Baumert, Multifaceted role of E-cadherin in hepatitis C virus infection and pathogenesis, <em>Proceedings of the National Academy of Sciences</em>, 2016, 113, 27, 7298</td>
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