ASO Author Reflections: Impact of Bile Duct Tumor Thrombus in Hepatocellular Carcinoma—Does it Influence Staging Systems?

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PAST

Compared with the frequency of vascular invasion, hepatocellular carcinoma (HCC) with bile duct tumor thrombus (BDTT) is relatively rare and poorly characterized.¹ Although surgical resection is the preferred treatment for HCC with BDTT, the impact of BDTT on prognosis after surgery remains unknown.² Although the biological features of BDTT are likely similar to those of portal vein tumor thrombus, whether BDTT affects the American Joint Committee on Cancer (AJCC) staging system also remains unknown. We thus focused on the prognosis of HCC patients with BDTT after surgery and the impact of BDTT on the AJCC staging system.

PRESENT

We retrospectively analyzed the long-term surgical outcomes of HCC patients with or without BDTT at five high-volume institutions, using propensity score matching (PSM). The results showed that BDTT was a significant risk factor that influenced overall survival (OS) and recurrence-free survival (RFS) rates in HCC with AJCC stage I–II both before and after PSM, but not in those with AJCC stage III. Presence of BDTT may increase the AJCC stage by one in AJCC stage I–II patients. The ability to predict RFS and OS might be higher using the modified AJCC staging system.

FUTURE

Although this study showed that HCC with BDTT was associated with significantly worse long-term surgical outcomes in AJCC stages I and II, our results are preliminary and must be validated in a larger cohort. Multiple staging systems have been developed to enhance prognostic evaluation of HCC.³ Among the proposed systems, the AJCC staging system is one of the most widely applied. A modified AJCC staging system to include BDTT status in stage I–II might have better prognostic ability. However, well-designed multicenter randomized controlled trials are needed to verify the impact of BDTT in HCC in the future.⁴

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