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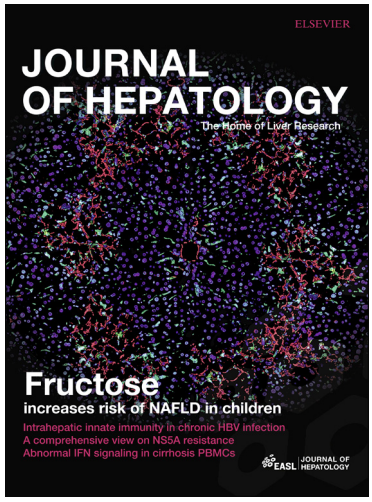

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The role of NAFLD in extrahepatic malignancies: the importance of ruling out the effect of obesity

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To the Editor:

We read with great interests the article by Gi-Ae et al[1]. Non-alcoholic fatty liver disease(NAFLD) is strongly associated with metabolic disorders such as insulin resistance, diabetes and cardiovascular diseases which implies that NAFLD might have an important part in extrahepatic complications. Gi-Ae et al not only confirmed that NAFLD is closely related to the development of hepatocellular carcinoma but also demonstrated that NAFLD is a risk factor for extrahepatic malignancies such as male colorectal carcinoma and female breast cancer. Their findings are based on the data collected from a long-time follow-up of 25947 patients (8721 with NAFLD). However, we would like to raise following comments.

It is reported that NAFLD is closed correlated with obesity with a comorbidity rate as high as 80% and only less than 20% NAFLD patients have a normal BMI and no metabolism disorders[2]. In Gi-Ae et al's study, they firstly demonstrated that NAFLD acts as a significant risk factor in the development of male colorectal carcinoma and female breast cancer. Considering that obesity can greatly increase the risk of breast cancer in pre- and post-menopausal women, they separated these patients into obese and non-obese subgroups for further analysis which led to different discoveries. However, we are confused about why they did not apply the same subgroups to male colorectal patients since obesity actually plays a crucial role in the carcinogenesis and development of colorectal carcinoma[3]. The underlying mechanism might be attributed to obesity-related metabolism disorder. Visceral obesity or VAT is a major risk factor in the development of colorectal carcinoma. Obese people are more likely to develop colorectal adenoma, a distinctive precancerous lesion for colorectal carcinoma and have a higher incidence in colorectal carcinoma[3]. Furthermore, epidemiological data suggest that obesity raises up the risk by 30%-70% in men while the effect is much less significant in women. Then we took a