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# Letter to the Editor: Use of Direct Liver Stiffness Measurement in Evaluating the Severity of Liver Cirrhosis in Patients with Hepatocellular Carcinoma

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**Letter to the Editor: Use of Direct Liver Stiffness  
Measurement in Evaluating the Severity of Liver Cirrhosis in  
Patients with Hepatocellular Carcinoma.**

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**Letter to the Editor: Use of Direct Liver Stiffness Measurement in Evaluating the Severity of Liver Cirrhosis in Patients with Hepatocellular Carcinoma.**

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For Peer Review

Dear Editor,

We read with great interest the article by *Gu J* and co-workers [1] in which the authors have investigated the effective role of direct liver stiffness measurement in evaluating the severity of liver cirrhosis in patients with HCC undergone surgical resection. We would like to raise some interesting points.

In their study, the authors found the direct liver stiffness measurement more effective to pre-operative transient elastography in assessing the severity of hepatic cirrhosis in HCC patient, especially in moderate to severe cirrhosis with a sensitivity of 95.3% and 83.3%, respectively. Regarding etiology, they only analyzed liver cirrhosis due to hepatitis B and C; they don't show data about other etiologies, such as alcoholic or nonalcoholic steatohepatitis (NASH). Nowadays, the prevalence of these etiologies in Western countries is increasing rapidly. We wonder if the novel device could have the same sensitivity in assessing the severity of liver cirrhosis in these clinical settings.

In the discussion section of the manuscript the authors stated that, to date, transient elastography has not been used for evaluating the severity of liver cirrhosis in HCC patients scheduled for hepatectomy. Actually, in a previous study on 77 HCC patients [2] the pre-operative liver stiffness measurement was used to provide a better evaluation of portal hypertension and to predict surgical risk in resectable single HCC. Moreover, *Kim et al.* [3] reported liver stiffness measurement of 25.6 kPa and a IGC R15 of 12% as the most accurate cut-off values for the prediction of post-operative hepatic failure.

An important point of weakness of this study is represented by the impossibility to perform a direct liver stiffness measurement in patients undergoing liver resection by laparoscopic or robotic approach. As evidenced from the literature, mini-invasive approaches in hepatic surgery are associated with a significant decrease in the incidence of post-operative ascites and liver failure [4]. This concept lies on the preservation of collateral circulation in the abdomen, reducing the damage to muscles and round ligament, which may contain important collateral vessels.

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Furthermore, the authors considered this new device very useful for a quick evaluation of the severity of liver cirrhosis, but we think that the extents of hepatectomy should be accurately evaluated before surgery and not intra-operatively, especially in HCC patients according to Barcelona Clinic Liver Cancer staging system [5].

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None.

***Conflicts of interest.***

There are no conflicts of interest to declare.

For Peer Review

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