

Is the use of non-selective beta-blockers necessary in cirrhotic patients with small varices?

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Non-selective β -blockers (NSBBs) could effectively prevent the development of first variceal bleeding in cirrhotic patients with medium/large varices. However, as recently reviewed by Giannelli *et al* [1], the clinical benefit of NSBBs remains controversial in cirrhotic patients with small varices. In line with their considerations, we would like to further comment on the controversy.

A previous meta-analysis demonstrated that the incidence of first variceal bleeding was not different between patients with small varices who received NSBBs and those who did not [2]. On the other hand, two randomized controlled trials (RCT) demonstrated that NSBBs could not prevent the development of large varices in patients with small varices. In a previous study by Cales *et al*, the NSBB group had a higher proportion of development of large varices than the placebo group (52/60 versus 30/67, $P < 0.0001$, Chi-square test) [3]. In a recent study by Sarin *et al*, the cumulative incidence of growth of varices was similar between NSBB and placebo groups (11% versus 16%, $P = 0.786$, log-rank test) [4]. By contrast, another RCT by Merkel *et al* achieved a positive result, suggesting that the cumulative risk of growth of varices was significantly lower in the NSBB group than in the placebo group (20% versus 51%, $P < 0.001$, log-rank test) [5]. But it should be noted that NSBB did not improve the survival and increase the rate of adverse events.

Taken together, we should acknowledge the inconsistency of evidence regarding the benefit of NSBBs for the management of small varices in liver cirrhosis. Additionally, given the potential drug-related adverse events, the use of NSBBs might be unnecessary in such patients.

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