

## High vs Low Mean Arterial Pressure in Cirrhosis Patients



A new study assessed the impact of high mean arterial pressure (MAP) on renal outcomes in critically ill cirrhosis patients with septic shock (CIC). The efficacy of a high MAP strategy (80-85 mm Hg; H-MAP) was compared to a low MAP strategy (60-65 mm Hg; L-MAP) in improving 28-day mortality in CIC. Additionally, the study examined the reversal of shock, the occurrence of acute kidney injury (AKI) by day 5, the incidence of intradialytic hypotension (IDH), and any adverse events associated with the different strategies.

The study found that the baseline characteristics of the patients in the high MAP (H-MAP) and low MAP (L-MAP) groups were similar. When analysed according to the intention-to-treat (ITT) approach, there were no significant differences between the H-MAP and L-MAP groups in terms of 28-day mortality (65% vs. 56%), shock reversal (47% vs. 53%), and the development of AKI (45% vs. 31%).

However, the H-MAP group had a lower incidence of IDH (12% vs. 48%) and a higher rate of adverse events requiring discontinuation of the protocol (24% vs. 11%) compared to the L-MAP group.

In the per-protocol analysis, it was observed that the H-MAP group had a significantly higher rate of AKI reversal (53% vs. 31%) and a lower incidence of IDH (4% vs. 53%) compared to the L-MAP group. Furthermore, markers of endothelial repair, such as ADAMTS and angiotensin-2, were found to be higher in the H-MAP group compared to the L-MAP group.

Overall, these findings show no significant survival benefit associated with a higher MAP strategy. Targeting a higher MAP was associated with a higher incidence of adverse events. However, there were improved renal outcomes and better lactate clearance among patients who could achieve the higher target MAP without adverse events. Based on these findings, the study suggests that a higher MAP strategy may be recommended with careful monitoring for adverse events for patients with cirrhosis and septic shock. However, it is important to closely monitor and manage any potential complications that may arise from maintaining a higher MAP.

Source: [Journal of Hepatology](#)

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