

Can a blood marker show gut barrier damage in advanced cirrhosis?



In advanced cirrhosis, the **gut barrier** can become damaged, allowing bacteria and harmful substances to enter the body and trigger complications.



Researchers from **MICROB-PREDICT** studied a blood marker called **Villin-1** that may indicate **gut barrier** damage in cirrhosis.



Higher levels of **Villin-1** were found in patients with acutely decompensated cirrhosis.

1 What happens in advanced cirrhosis?



Gut barrier becomes damaged



Bacteria and harmful substances can enter the body



This can trigger inflammation and lead to complications such as **acute-on-chronic liver failure (ACLF)**.

2 What is Villin-1?



Villin-1 is a protein found in intestinal cells and released into the blood when the gut lining is damaged.



It can be measured with a simple blood test.

3 What did the researchers do?



Measured serum Villin-1 levels in patients with cirrhosis.

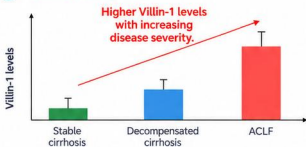


Compared patients with stable cirrhosis and those with acutely decompensated cirrhosis (including acute-on-chronic liver failure, ACLF).



Validated the findings in an independent patient cohort.

4 What did they find?



Villin-1 levels were significantly higher in patients with acutely decompensated cirrhosis and ACLF compared to stable cirrhosis.

5 What could this mean for patients?



A blood test for Villin-1 could help identify patients at higher risk of complications.



It could be part of a panel of biomarkers to guide clinical decisions in advanced cirrhosis.



Goal: earlier identification of high-risk patients and improved care.



This approach could help move from reactive to proactive care, identifying patients before complications develop.

But this is still experimental.

6 Is there a new treatment for patients?



No – not yet.



This study looked at a blood marker, not a treatment.



More research is needed to see if targeting gut barrier damage can improve outcomes in cirrhosis.

7 What is the bigger picture?



This study adds to our understanding of how gut barrier damage contributes to complications in advanced cirrhosis.

Villin-1 could become an important tool to identify high-risk patients early.

8 About the research



Title of Publication: "Serum Villin-1 – A Novel Marker of Gut Barrier Damage in Acutely Decompensated Cirrhosis: A Cohort Study and Validation."



Conducted by Tornai and colleagues on behalf of the MICROB-PREDICT and PREDICT study groups of the EASL-CLIF Consortium.



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