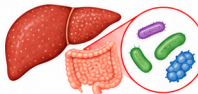


Does treatment with terlipressin increase the risk of colonisation with drug-resistant bacteria in patients with cirrhosis?



Terlipressin is a medication commonly used to treat serious complications of advanced cirrhosis, such as variceal bleeding or hepatorenal syndrome.



Researchers from MICROB-PREDICT studied whether terlipressin treatment is associated with an increased risk of becoming colonised with drug-resistant bacteria in patients with decompensated cirrhosis.



Terlipressin treatment was associated with a higher risk of colonisation with drug-resistant bacteria.

1 What is terlipressin and why is it used?



Terlipressin is a medication that narrows blood vessels and is commonly used to treat serious complications of advanced cirrhosis, such as:



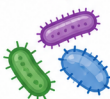
Variceal bleeding



Hepatorenal syndrome (kidney dysfunction)

These complications are life-threatening and require urgent treatment.

2 What are drug-resistant bacteria?



Drug-resistant bacteria are bacteria that are no longer effectively killed by commonly used antibiotics.

People with advanced cirrhosis can carry these bacteria in their gut (intestinal colonisation) without being infected, but colonisation can increase the risk of later infections, which can be more difficult to treat.

3 What did the researchers do?



Analysed data from a large group of patients with decompensated cirrhosis who received terlipressin treatment.



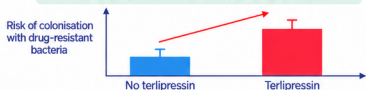
Examined stool samples to determine whether patients became colonised with drug-resistant bacteria.



Compared the risk of colonisation in patients who received terlipressin with those who did not, and adjusted for other factors that could influence the results.

4 What did they find?

Patients who received terlipressin had a higher risk of becoming colonised with drug-resistant bacteria.



Terlipressin treatment was independently associated with an increased risk of colonisation with multidrug-resistant bacteria, even after taking other risk factors into account.

5 What does this mean for patients?



Terlipressin treatment may increase the risk of becoming colonised with drug-resistant bacteria.



Awareness of this risk can help guide closer monitoring and infection prevention measures.



These findings highlight the importance of careful antibiotic stewardship and infection control in patients receiving terlipressin.



Patients receiving terlipressin may be at higher risk of carrying drug-resistant bacteria in their gut, which could increase the risk of future infections.

6 Is terlipressin still used in clinical practice?



Yes.



Terlipressin remains an important and widely used treatment for serious complications of advanced cirrhosis, such as variceal bleeding and hepatorenal syndrome.

The benefits of terlipressin often outweigh the risks, but these findings highlight the need for careful monitoring and infection prevention strategies.

7 What is the bigger picture?



This research adds to our understanding of how treatments for complications of cirrhosis can influence the gut microbiome and the risk of carrying drug-resistant bacteria.



More research is needed to find the best strategies to minimise this risk while ensuring that patients can still receive effective treatment for serious complications of cirrhosis.

8 About the research



Title of Publication: Terlipressin therapy is associated with increased risk of colonisation with multidrug-resistant bacteria in patients with decompensated cirrhosis Mücke MM, Hernández-Tejero M, Gu W, et al. (2024)



Conducted by researchers from the MICROB-PREDICT consortium.



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