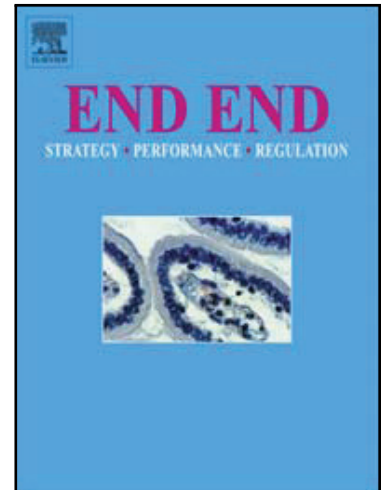


Accepted Manuscript

Effect of probiotic treatment on cirrhotic patients with minimal hepatic encephalopathy: a meta-analysis

Qing Cao , Cheng-Bo Yu , Shi-Gui Yang , Hong-Cui Cao ,
Ping Chen , Min Deng , Lan-Juan Li

PII: S1499-3872(18)30012-2
DOI: [10.1016/j.hbpd.2018.01.005](https://doi.org/10.1016/j.hbpd.2018.01.005)
Reference: HBPD 5



To appear in: *The End-to-end Journal*

Please cite this article as: Qing Cao , Cheng-Bo Yu , Shi-Gui Yang , Hong-Cui Cao , Ping Chen , Min Deng , Lan-Juan Li , Effect of probiotic treatment on cirrhotic patients with minimal hepatic encephalopathy: a meta-analysis, *The End-to-end Journal* (2018), doi: [10.1016/j.hbpd.2018.01.005](https://doi.org/10.1016/j.hbpd.2018.01.005)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Meta-analysis

Running title: Probiotic for minimal hepatic encephalopathy

Effect of probiotic treatment on cirrhotic patients with minimal hepatic encephalopathy: a meta-analysis

Qing Cao, Cheng-Bo Yu, Shi-Gui Yang, Hong-Cui Cao, Ping Chen, Min Deng and Lan-Juan Li

Hangzhou, China

Author Affiliations: State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, Collaborative Innovation Center for Diagnosis and Treatment of Infectious Diseases, The First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou 310003, China (Cao Q, Yu CB, Yang SG, Cao HC, Chen P, Deng M and Li LJ)

Corresponding Author: Lan-Juan Li, MD, State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, Collaborative Innovation Center for Diagnosis and Treatment of Infectious Diseases, The First Affiliated Hospital, Zhejiang University School of Medicine, #79 Qingchun Road, Hangzhou 310003, China (Tel: +86-571-87236458; Email: ljli@zju.edu.cn)

© 2017, Hepatobiliary Pancreat Dis Int. All rights reserved.

doi: 10.1016/S1499-3872(17)60012-2

Published online December 11, 2017.

BACKGROUND: Minimal hepatic encephalopathy (MHE) is an early and reversible form of hepatic encephalopathy. The documentations on the treatment with probiotics are inconsistent. The present meta-analysis was to verify the role of probiotics in the treatment of cirrhotic patients with MHE.

DATA SOURCES: Seven electronic databases were searched for relevant randomized controlled trials (RCTs) published until July 2015. The effects of probiotics on serum ammonia, endotoxin, and MHE were evaluated.

RESULTS: A total of 14 RCTs (combined $n=1132$) were included in the meta-analysis. When probiotics was compared to placebo or no treatment, probiotics were more likely to reduce values in the number connection test (NCT; week 4: MD=-30.25, 95% CI: -49.85 to -10.66), improve MHE (week 4: OR=0.18, 95% CI: 0.07 to 0.47; week 12: OR=0.15, 95% CI: 0.07 to 0.32), and prevent overt HE progression (week 4: OR=0.22, 95% CI: 0.07 to 0.67) in patients with liver cirrhosis. When probiotics was compared to lactulose, probiotics tended to reduce serum ammonia levels (week 4: MD=-0.33 $\mu\text{mol/L}$, 95% CI: -5.39 to 4.74; week 8: MD=6.22 $\mu\text{mol/L}$, 95% CI: -24.04 to 36.48), decrease NCT (week 8: MD=3.93, 95% CI: -0.72 to 8.58), improve MHE (week 4: OR=0.93, 95% CI: 0.45 to 1.91; week 12: OR=0.73, 95% CI: 0.35 to 1.51) and prevent the development of overt HE (week 4: OR=0.96, 95% CI: 0.17 to 5.44; week 12: OR=2.7, 95% CI: 0.50 to 14.64) in patients with liver cirrhosis. However, lactulose appears to be more effective in reducing NCT values as compared to probiotics (week 4: MD=6.7, 95% CI: 0.58 to 12.82).

CONCLUSION: Probiotics can decrease serum ammonia and endotoxin levels, improve MHE, and prevent overt HE development in patients with liver cirrhosis.

Download English Version:

<https://daneshyari.com/en/article/8735247>

Download Persian Version:

<https://daneshyari.com/article/8735247>

[Daneshyari.com](https://daneshyari.com)