Probiotics found to reduce hepatic encephalopathy

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Probiotics could emerge as a treatment plan to manage hepatic encephalopathy (HE) therapy after a new study announced at the International Liver Congress 2013 found they significantly reduced development of the notoriously difficult-to-treat disease.

The study analysed the efficacy of probiotics in preventing the development of HE in 160 cirrhotic patients over a period of approximately nine months and found significant improvements in reducing patients' arterial ammonia levels after three months of treatment with probiotics.

Ammonia, produced by gut bacteria, is thought to be one of the main mediators of cerebral dysfunction in HE. Probiotics work by enriching the gut flora with a non-urease producing microorganisms, which decrease ammonia production. Probiotics are live microorganisms (mostly bacteria) that produce a health benefit on the host when administered in adequate amounts.

Twice as many patients taking a placebo developed overt HE (the study's primary endpoint) compared to patients taking probiotics in the form of a capsule.

EASL's Treasurer, Prof. Mauro Bernardi welcomed the findings and said they would provide a positive impact for cirrhotic patients at risk of developing HE for whom the prognosis is typically very poor.

Prof. Bernardi said: "Hepatic encephalopathy is an insidious disease that's caused by an accumulation of toxins in the blood that are normally removed by the liver. Treatment normally involves the use of antibiotics or laxatives to suppress the production of toxic substances in the intestine but there is still a great deal of room for improvement so it will be exciting to see the results of further studies to determine if clinicians have a new form of treatment on the cards."

Hepatic encephalopathy is a spectrum of neuropsychiatric abnormalities including personality changes, intellectual impairment and reduced levels of consciousness in patients with liver failure, after exclusion of other known brain disease.

More information: References:

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