Amsterdam, September 19, 2016

New study results show improvement of liver function in cirrhosis patients by probiotics

A study by the University of Graz on the effect of the probiotic formulation Ecologic® Barrier on immune function, bacterial translocation and gut permeability in patients with cirrhosis, has been published in the journal of AP&T Alimentary Pharmacology and Therapeutics. The results of this study show that administration of this probiotic for 6 months significantly improved antimicrobial activity and immune function, and improved liver function. Especially the subgroup of alcoholic cirrhotics might benefit from probiotic supplementation.

Liver cirrhosis
Liver cirrhosis is the 9th biggest burden of diseases in Europe and the 11th most common cause of death in the US. Common complications of cirrhosis are bacterial infections caused by a significantly impaired immune system. Bacterial infections are often a fatal complication of patients with liver disease.

Probiotics
Probiotics are already recommended for a variety immune-related diseases such as allergies. The effects appear to be related to improving the intestinal barrier function and stimulating favourable immune responses. Previous clinical trials have shown promising effects for probiotics on liver function in different stages of alcoholic liver disease and improve the function of specific immune cells, like neutrophils and neutrophil phagocytosis. Neopterin belongs to the chemical group known as pteridines. It is synthesized by human macrophages upon stimulation with the cytokine interferon-gamma and is indicative of a pro-inflammatory immune status. Neopterin serves as a marker of cellular immune system activation.

Study design
In a randomised, double blind, placebo-controlled study stable cirrhotic out-patients received either a daily dose of Ecologic® Barrier (n=44) or placebo (n=36) for 6 months and where followed up for another 6 months. The primary end point was the change in the capacity of neutrophils to internalize bacteria, so called phagocytosis. Secondary endpoints were number of clinically relevant infections, neutrophil's capacity to produce oxygen radicals to kill bacteria-oxidative burst endotoxin levels, inflammatory responses and gut permeability.

Key findings
The probiotics were very well tolerated by the patients and side effects were rare. Although there was no difference found in the neutrophil capacity to internalize bacteria, probiotic supplementation significantly increased serum neopterin levels and the production of reactive oxygen species by neutrophils. This could explain the beneficial effect of probiotics on immune function. Also, liver function improved during intervention and decreased without it.

Wincelove Probiotics
Wincelove probiotics has been researching and developing probiotic formulations for over 25 years. The company closely collaborates with research institutes and academic hospital to develop evidence-based, effective probiotics. Wincelove hopes in further randomised, controlled settings, ideally in a
multicentre setting, to confirm the beneficial effects of Ecologic® Barrier on anti-microbial activity and liver function.

End of press release:
For more information about this study or Winclove's research contact Saskia van Hemert:
s.vanHemert@winclove.nl
+31 (0)20 435 02 35

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