

The role of probiotics in pouchitis

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In their invited narrative review article, Gionchetti *et al* (April-June issue) [1] report 6 studies in which probiotics were used for maintenance of remission in pouchitis or induction of remission in acute pouchitis. In all but one studies VSL#3 probiotic was used. In 4 studies treatment group (VSL#3 regimen was used in 3 studies) was compared to a control group [2-5]. [Q1. references are missing]. The studies of VSL#3 may form a coherent group, although the duration of treatment varied between 9 and 12 months. A recent meta-analysis of probiotic efficacy for gastrointestinal diseases synthesized data of 4 studies of pouchitis treatment [6]. In this systematic review the relative risk ratio for the probiotic group was 0.17 [95% Confidence Interval (CI) 0.10-0.30]. However, most of the studies cited by the article of Gionchetti *et al* were not included in this meta-analysis. The heterogeneity among the

3 probiotic-control studies referred by Gionchetti *et al* is not statistically significant (Cochran's Q for Odds Ratio, Risk Ratio and Risk Difference is 3.435, 0.040 and 4.730, with 2 degrees of freedom, and P value of 0.178, 0.980 and 0.094, respectively). Using a fixed-effect meta-analysis model (NCSS 2007 software) the combined Odds Ratio for the disease is 0.036 (95% CI 0.011-0.113), the Risk Ratio for the disease is 0.182 (95% CI 0.100-0.328) and Risk Difference is -0.718 (95% CI -0.835 - -0.602) in favor of the probiotic group (Fig. 1). These results are in accordance with the findings of the systematic review [6]. Statistically significant heterogeneity will be detected if the study of Kuisma (*Lactobacillus rhamnosus* GG was used for 3 months) is included in the meta-analysis model.

It is of interest that a case report of 2 patients suggested that another type of probiotic, *Escherichia coli* Nissle 917, might be beneficial for the treatment of active pouchitis and for maintenance therapy [7].

The results of small clinical trials and anecdotal reports indicate the urgent need for large-scale, randomized, placebo-control trials.

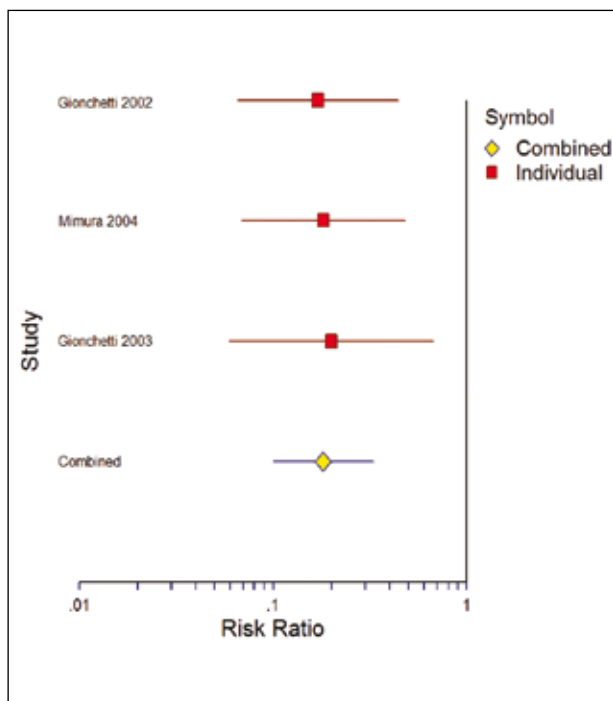


Figure 1 Forest plot of Risk Ratio of pouchitis in patients receiving #VSL3

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Conflict of Interest:

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Author's reply

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In their letter to the Editor about our review article (and not "narrative article") Nalmpantidis and Maris mention a meta-analysis [1] in which results with probiotic preparation VSL#3 in pouchitis are not included [2-4], suggesting their limited value. The authors concluded that there is an urgent need for a large, placebo-controlled trial on this topic.

The authors have probably chosen the wrong meta-analysis, because it was a non-specific meta-analysis on the treatment of pouchitis.

They should have considered the Cochrane meta-analysis on treatment and prevention of pouchitis [5], in which all studies, where VSL#3 was used, were included and were considered the most appropriate and the best performed with clear evidence of the efficacy of VSL#3 both in the prevention of pouchitis onset and in the maintenance treatment of remission.

Furthermore, based on the results of these studies, the ECCO Consensus has suggested the use of VSL#3 in both indications [6].

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