



Correspondence

The supplement of *Lactobacillus* for women

Dear Editor,

The August issue of the *Taiwanese Journal of Obstetrics and Gynecology* included a very interesting article entitled “Oral *Lactobacillus rhamnosus* GR-1 and *Lactobacillus reuteri* RC-14 to reduce Group B *Streptococcus* colonization in pregnant women: a randomized controlled trial” [1]. I read it with interest and would like to comment on this article.

Lactobacillus species have been thought to be the *sine qua non* of healthy vaginal microbial communities in women during reproductive age [2,3], and the presence of *Lactobacillus* species is related to the completion of the growth of many harmful microorganisms, such as Group B *Streptococcus* (GBS), *Escherichia coli*, *Staphylococcus aureus*, and *Gardnerella vaginalis*. Therefore, supplement of probiotic formulations containing *Lactobacillus* species may be beneficial for vaginal health, which could support the positive findings of the study provided by Dr Ho and colleagues [1] to show the successful eradication of GBS in the original positive for GBS in pregnant women.

However, we are wondering whether all probiotics containing different species of *Lactobacillus* are similarly effective for prevention or treatment in pregnant women with GBS infection. Did different *Lactobacillus* species have the similar bacteriostatic and/or bactericidal effect on the GBS? For example, Audirac-Chalifour et al [4] found that human papillomavirus-negative women had an elevated proportion of *Lactobacillus crispatus* and a lesser proportion of *Lactobacillus iners*, whereas human papillomavirus-positive women had a significantly decreased proportion of both species (46% vs. 13.3% and 14.9% vs. 2.1%, respectively). In addition, the decreased proportion of *Lactobacillus* species seemed to be more apparent in women with cervical cancer (1.3% for *L. crispatus* and 0% for *L. iners*, respectively) [4]. Furthermore, *Lactobacillus jensenii* and *Lactobacillus vaginalis* were totally absent in women with abnormal Papanicolaou smear [4]. Other studies showed the negative association of abundance of *Lactobacillus* species and severity of Papanicolaou smear. All suggested that not only presence of *Lactobacillus* species, but also presence of certain-type *Lactobacillus* species, might be important for general

health of the lower genital tract in women [5]. We hope that the authors would like to provide their opinion.

Thank you.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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