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Probiotics in the treatment of (Vulvovaginal Candidiasis) VVC and (Bacterial Vaginosis) BV

The human vaginal microbiota plays an important role in the maintenance of a woman's health, as well as of her partner and new-borns. When this predominantly Lactobacillus community is disrupted or decreased in abundance, Vaginitis may occur. Of the millions of cases of vaginitis each year, most are caused by bacterial vaginosis (BV), followed by Vulvovaginal candidiasis (VVC). BV is a dysbiosis of the vaginal environment that due to frequent recurrences is one of the most frequent causes of gynaecological examination, BV can cause economic, social and psychological damage. BV is associated with ascending infections and obstetrical complications, such as chorioamnionitis and preterm delivery, as well as with urinary tract infections and sexually transmitted infections. Vulvovaginal candidosis (VVC) is the second most common cause of vaginitis, and it is diagnosed in up to 40% of women with vaginal complaints in the primary care setting. Despite therapeutic advances, candidiasis remains a common fungal infection most frequently caused by *C. albicans* while other species such as *C. tropicalis*, *C. glabrata*, *C. parapsilosis* and *C. krusei* are increasingly isolated. Therapy with oral or local recommended antibiotics is often associated with failure and high rates of recurrences. (Antibiotics cannot always penetrate the pathogenic biofilm) The dominance of lactobacilli in healthy vaginal microbiota and its depletion in BV and VVC has given rise to the concept of oral or vaginal use of probiotic Lactobacillus strains for treatment and prevention of vaginitis. Probiotics, defined as live microorganisms that, when administered in adequate amounts, confer a health benefit on the host, are considered a valid and novel alternative for the prevention and treatment of female urogenital tract infections. Probiotics are well known for their ability to lower intravaginal pH, thus establishing a barrier

effect against many pathogens. Some strains are also able to create additional and more focused antagonistic activities mediated by specific molecules such as hydrogen peroxide and bacteriocins. In any case, despite some undeniable positive evidence, other intervention studies have at least partially failed to highlight a statistically significant alleviation of BV and VVC symptoms. This is most likely attributable to the lack of a specific inhibitory activity of the strains used towards the bacteria commonly causing BV, such as *G. vaginalis* and *E. coli*, and VVC such as *C. albicans*. Herein we present in vitro and clinical data to assess the effectiveness of specific probiotic strains in oral supplement, for the treatment of BV and VVC, and the prevention of recurrences.

Speaker Biography

Franco Vicariotto, Medicine Doctor is a specialist in Obstetrics and Gynecology and is now a senior consultant of San PIO X Hospital of Milan. He graduated in Medicine and Surgery at University of Milan, where he also achieved the specialization in Obstetrics and Gynecology. He is currently specialist consultant at Humanitas-S.PIO X Hospital of Milan and at Lower Genital Tract Disease Unit at the V. Buzzi Hospital - University of Milan. He is currently in the Board of several scientific societies. In the Board of SIM, the Italian Society of Menopause Founder and in the Board of SIFIOG (Italian society of supplements in Obstetrician and Gynecology). Founder and honorary president of ISDSP (international society of dietary supplements and phytoterapy) in the field of menopause he is a co-author of the guidelines for hormone and non-hormonal therapy With his long experience as a specialist in Gynecology, He is a clinical advisor on women's health for several Italian and International companies. He is also a clinical advisor for IQVIA Health. Author of many publications and moderator-spokesman in scientific meeting and conferences in Italy and international He speaks English and German.

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