

Improving Vaginal Health And Sexual Functioning In Gynecologic Cancer Survivors With Probiotics: A Pilot Study

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CONTEXT: Estrogens depletion during menopause causes changes in vaginal microflora with lactobacilli depletion, promoting bacterial overgrowth. So, vaginal atrophy and reduction of local defences impact negatively on sexual function and wellbeing of postmenopausal women. Oncologic patients, often suffering from early iatrogenic menopause, are affected even more deleteriously by atrophy symptoms with negative effects on quality of life and intimacy. **OBJECTIVE:** To investigate lactobacilli implementation role on sexual functioning in gynecologic cancer survivors with vaginal atrophy not eligible for HRT. **METHODS:** Patients were enrolled during outpatient follow up clinic. Inclusion criteria: previous gynecologic neoplasia inducing iatrogenic menopause, at least 5 years since last treatment, contraindications to perform HRT, clear symptoms of atrophy or sexual distress, agreement to participate in the study. Main exclusion criteria were: vulvo-vaginal infections, progression of disease. Atrophy symptoms were assessed before treatment by Vaginal Health Index (VHI) scoring, then after 1 and 6 months. Female Sexual Function Index (FSFI) questionnaire was administered (before treatment and after 6 months). **PATIENTS:** A total of 81 patients out of 102 selected completed the study protocol (18 for recurrences and 3 requiring antibiotics for severe vaginal infections were excluded from the study). **INTERVENTION:** Patients underwent an initial treatment for 4 weeks (one vaginal tablet containing 104 CFU/tablet freeze-dried *Lactobacillus rhamnosus* BMX 54), followed by maintenance therapy (three vaginal tablets weekly) for 24 weeks. **MAIN OUTCOMES MEASURES:** To evaluate improvement in vaginal atrophy related symptoms, pre- and post-treatment VHI and FSFI scores were compared in all eligible patients. **RESULTS:** Improvement in VHI scores before starting treatment protocol (8.6 ± 2.8), after 1 (10.3 ± 3.4 ; $p=0.007$) and 3 months after (11.9 ± 2.7 ; $p<0.0001$) were statistically significant. FSFI score improved significantly after 6 months from the beginning of lactobacilli implementation (13.2 ± 6.3 and 21.2 ± 7.3 respectively; $p<0.0001$). **CONCLUSIONS:** Despite the limited sample size, Lactobacilli implementation showed promising results in solving vulvo-vaginal atrophy related symptoms, demonstrating to be effective, safe and well tolerated by patients, so becoming considerable as tool in gynecologic cancer patients not suitable for HRT suffering from vaginal menopausal symptoms.

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