

Probiotic therapy and its effect on vaginal flora

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Objective

To examine the effectiveness of vaginal capsules (Vivag pessaries) containing *Lactobacillus* probiotics in pregnant women of different age, parity, trimester or week of pregnancy ie whether probiotics impact on the recovery of microflora in the reproductive tract of pregnant women. The study was conducted in a primary care gynecological practice of the Zadar County Medical Center in cooperation with the Institute of Public Health of the Zadar County. Inflammation of the vagina (vaginitis) and vaginal flora relations disorder (vaginosis) are common nuisances during pregnancy caused by parasites, fungi and bacteria. Reduced amount of lactobacilli in vaginal secretions increases vaginal pH leading to the predominance of other vaginal flora.

Methods

In the period from the 1st of November 2011 to the 30th of June 2012, vaginal secretions were taken from 137 pregnant women of different age, parity and weeks of pregnancy. Vaginal discharge was taken by vaginal swab, and then a secretions smear was made on agglutination slide. It was coloured by Gram and a microscopic analysis of the preparation was carried out at the Microbiological Laboratory of the Zadar County Institute of Public Health. In our sample there were 137 pregnant women from the first to third trimester or 1-40 weeks of pregnancy. The subjects were divided into three groups. The first group consists of 102 pregnant women (74. 45%) who had a mass of lactobacilli and no clinical signs of inflammation. The second group consists of 20 pregnant women (14. 59%) who had vaginal imbalance (vaginosis) with a reduced number of lactobacilli without clinical signs of inflammation and with subjective difficulties (eg discharge). The third group consists of 13 women (9. 48%) who had clinical signs of inflammation of vagina and discomfort with low lactobacilli. Two vaginal smears (1. 45%) were not sufficient for analysis. Group I-102 pregnant women with normal test results had not received therapy. Group II-20 pregnant women with vaginal imbalance, with a reduced number of lactobacilli and without clinical signs of inflammation, received Vivag pessaries 1/caps/day for 10 days. Group III-13 pregnant women with clinical signs of inflammation of the vagina and low lactobacilli were treated with Vivag pessaries (*Lactobacilli*) and an antifungal agent. Together with Vivag pessaries and vaginal antifungal agent, two of them received also vaginal antibiotics due to clue-cells findings (*Gardnerella vaginalis*).

Results

In the first group, 102 pregnant women had normal vaginal smear (*Lactobacilli* mass). In the second group, 100 % of women established normal vaginal flora. In the third group, all pregnant women were treated with Vivag pessaries and an antifungal agent. Two pregnant women were treated with current therapy and vaginal antibiotics. In the second and third groups, the normal vaginal flora was established after the therapy which was confirmed by vaginal smear control 10 days later.

Conclusion

Vivag pessaries (*Lactobacilli*) successfully establish normal vaginal flora by applying one pessary during 10 days while 6. 06 % (2) of tested women needed vaginal antifungal and antibiotic therapy so that clinical signs of the inflammation of the vagina could disappear.