CHAPTER 17

THE ANAEROBIC BACTERIAL FLORA OF THE VAGINA IN HEALTH AND DISEASE.

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ABSTRACT

A quantitative sampling method was used to analyse the vaginal flora from healthy women and women with a variety of genital diseases.

Single samples were taken from 30 asymptomatic women, the mean total bacterial count was $8.4 \log_{10}$ cfu/g consisting of $8.2 \log_{10}$ cfu/g anaerobes and $7.4 \log_{10}$ cfu/g aerobes. The vaginal flora was composed predominantly of aerobic and anaerobic lactobacilli, coryneforms, *Staphylococcus epidermidis*, *Bacteroides* spp., *Bifidobacteria*, and anaerobic Gram-positive cocci. In multiple samples taken throughout the menstrual cycle from ten of these asymptomatic women the mean number of species decreased significantly from a mean of 5.4 at the beginning of the cycle to 3.6 at the end, but the bacterial counts did not change.

The bacterial flora of 82 women with a variety of different genital diseases was essentially similar with anaerobes outnumbering aerobes by about one log unit except in women with gonorrhoea or who were contacts of men with non-specific urethritis (NSU). However, a combination of *Gardnerella vaginalis* and anaerobic Gram-positive cocci was found in seven out of 14 patients with non specific vaginitis (NSV) and in five out of 16 NSU contact patients but only occasionally in other genital diseases and in asymptomatic women. There were no particular changes in the vaginal flora associated with the presence of known pathogens such as *Neisseria gonorrhoeae*, *Trichomonas vaginalis* and *Candida albicans*. Lactobacilli did not confer any protective effect by