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Presence of *Gardnerella vaginalis* in healthy portuguese women – a pilot study

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Bacterial vaginosis (BV) has an important position worldwide, as the leading vaginal disorder in women, and affects 30-50% of African women and 10-20% of White women of reproductive age. This condition although not mortal causes great discomfort and may lead to other complications such as pre-term labour or increase susceptibility for HIV infection.During BV occur a decrease of Lactobacillus spp. present in the vaginal epithelium and an increase in the number of anaerobic microorganisms like *Gardnerella vaginalis*, *Pretovella* spp., Mobilincus spp.; *Mycoplasma hominis* and *Atopobium vaginae*. Gardnerella vaginalis is also responsible for the formation of a biofilm in the vaginal epithelium in sick women's. However, the direct correlation between the pathology and the causing agent (or agents) has not been clearly established.Currently there is only one article in PubMed (Guerreiro *et. al*, 1998) referring to the prevalence of bacterial vaginosis in Portugal and we aim to extend the research in this field specifically to the portuguese population. As part of this effort one of our aims it to characterise the bacterial population of portuguese women both healthy and diagnosed with BV. As such we collected swab samples of vaginal fluids from protuguese women with the help of health professionals and using self collection. The swabs were collected and treated within 24 hours at the University of Minho for the characterization of the bacterial population present, by using conventional microbiological growth techniques, PNA-FISH microscopy and 16S PCR.It was found that about 20% of the samples tested possessed *G. vaginalis* and all possessed *Lactobacillus* spp. using all 3 identification techniques described. This result is consistent with previous reports of G. vaginalis prevalence althought slightly lower, and shows that traditional microbiological techniques, microscopy and molecular methods were consistent in terms of results.

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