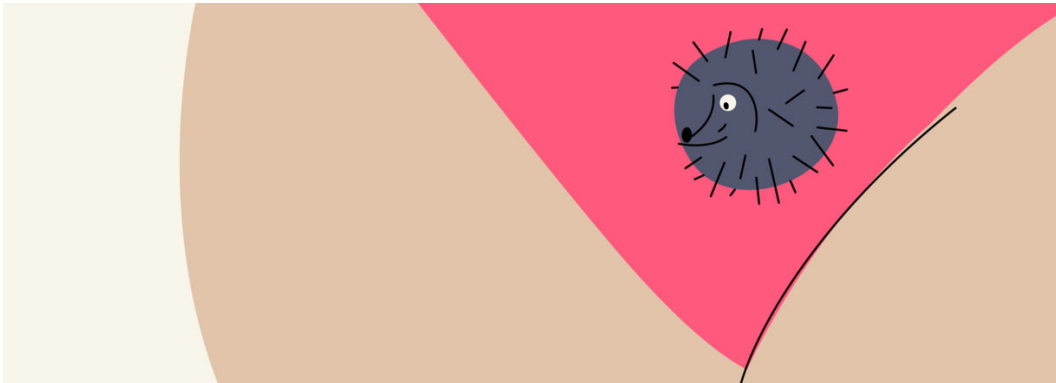


Aerobic vaginitis: No longer a stranger



For a long time, the vaginal disorders have been classified as either BV caused by (facultative) anaerobic microorganisms like Gardnerella vaginalis – or Candidiasis caused by yeast belonging to the Candida group. Over the years, significant evidence has been collected to show, that a third “condition” is relevant, when a woman has vaginal disturbances. This means that some women considering to have BV, in fact had AV.

The condition is now well described, as in the scientific paper: Aerobic vaginitis: No longer a stranger. Aerobic does not relate to exercise – only that the related microorganisms need oxygen to survive. Whereas BV has a prevalence of up to 50%, Aerobic vaginitis prevalence is lower – between 7 and 12%

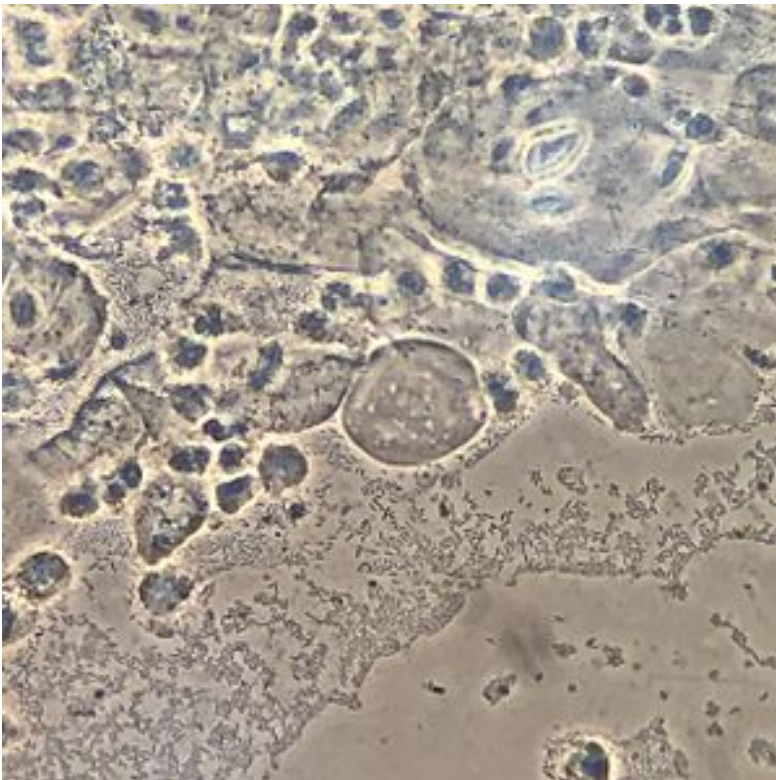
The differences related to bacterial vaginosis are described in below:

Condition	Bacterial vaginosis	Aerobic vaginitis
Reduced number of lactic acid bacteria	+	+
Dominant microorganisms	<i>Gardnerella vaginalis</i> Several others	<i>E. coli</i> , <i>Staph. aureus</i> , <i>Streptococcus</i> , <i>Enterococcus</i>
Discharge	Fishy smelling	Foul, rotten smell
pH	Increased	Significantly increased
Inflammation	No	Red, edematous, ulcerations Vulval burning or stinging
Colour of discharge	Gray, watery	Yellow, green, thick, mucoid
Bleeding points	No	Bleeding points and erosions Vaginal sting and pain
Dyspareunia (problems in intercourse)	No	Sometimes
Microscopy	Granular aspects	Leucocytes, parabasal or immature epithelial cells
Agents sensitive to	Metronidazol,	Clindamycin more efficient- but resistance development! Kanamycin

Wet smear microscopy is the preferred diagnosis method. Prevalence of AV is increasingly identified in Europe and Asia, but yet still mostly underdiagnosed in US. A number of trials identify AV as the cause of vaginal disorders between 2 and 26%, with most likely prevalence of 10% of the tested women.

It is probable that several of the complications associated with BV in fact are caused by AV. This includes preterm delivery and preterm membrane rupture, sexually transmitted infections and HPV-induced cervix lesions.

There is increasing evidence, that certain lactic acid bacteria stimulate the immune defense in the vagina. It is not clear, whether the dominance of pathogenic organisms is caused by a weakened immune defense due to reduced number of lactic acid bacteria – or the other way around, that the pathogenic bacteria are pushing away the lactic acid bacteria.



Aerobe vaginitis and LadyBalance

The microorganisms causing bacterial vaginosis and candidiasis cannot metabolize lactose, therefore the use as a nutrient in the vagina is considered safe. It is different for the aerobe bacteria. Generally they can grow on lactose and some are relative resistant to acid. But LadyBalance has been used by thousands of women having

vaginal disorders - with good results. According to the referred investigations, a significant part of these women must have had AV. Then why does the lactose vaginal tablet also helps against AV?

The answer must lie in the basic assumption confirmed by the effectiveness of the lactose tablet. The vaginal disorders are caused by a deficiency of nutrients leading to a lack of lactic acid bacteria. Supplying the nutrients leads to increased number of lactic acid bacteria and relieves the symptoms. The lactic acid bacteria stimulate the immune system and combat the pathogenic bacteria.

Dear users of LadyBalance vaginal tablets. If you have any experience related to aerobic vaginitis and lactose tablets, please inform us. Next user survey will include this aspect, to get a clearer overview of the effectiveness against AV.

Reference: Donders et al. (2017) Aerobic vaginitis: No longer a stranger. *Research in Microbiology* 168 845 - 858