

# Bacterial Infection-Bacterial Vaginosis

Jimmy Hall\*

Department of Immunology, University of Massachusetts, USA

Bacterial vaginosis is one of the types of vaginal infection. The normal vagina contains healthy bacteria and unhealthy bacteria. When more unhealthy bacteria grow more than healthy bacteria Bacterial vaginosis occurs [1].

This is known in the 1950s as nonspecific vaginitis (NSV) which was studied extensively by the Gardner and Dukes [1].

The search for a single organism to explain the pathogenesis of BV (Bacterial vaginosis) has been unrewarding. Although *Gardnerella vaginalis* is found in all women with BV (Bacterial vaginosis), it is also present in 50% of healthy vaginal flora. *Mobiluncus* species, a highly motile curved bacillus, is found only when BV is present, but in only 50% of cases of BV (Bacterial vaginosis) [2].

Bacterial vaginosis is caused by the imbalance of the bacteria in the vagina. There is an alteration in the most common type of bacteria's and a hundred to thousand folds increases in total numbers of bacteria which are present. Typically, Lactobacilli become more common. Risk factors include douching, new or multiple sex partners, antibiotics, and using an intrauterine device, among others. However, it is not considered as a sexually transmitted infection. Diagnosis of Bacterial vaginosis is based on the symptoms, and verified by the vaginal discharge test and finding a higher than normal vaginal pH, and large numbers of bacteria. Bacterial vaginosis is often confused with a vaginal yeast infection or infection with *Trichomonas* [3].

Usually the treatment would be an antibiotic, such as clindamycin or metronidazole. These medications are also used in the second or third trimesters of pregnancy. However, this condition recurs very often following the treatment. Probiotics might help in prevention of re-occurrence. It is not clear that if the use of probiotics or antibiotics affects pregnancy outcomes [4].

Bacterial vaginosis is the most common vaginal infection in women of reproductive age. The percentage of women affected is between 5% and 70%. Bacterial vaginosis is the most common in Africa and least common in Asia and Europe. In United States women between the ages of 14 and 49 are affected i.e., about 30%. Rates vary considerably between ethnic groups within a country. While, the Bacterial vaginosis like symptoms have been described for recorded history.

Although previously it is considered as a mere nuisance infection, if bacterial vaginosis is untreated it may cause increased susceptibility to sexually transmitted infections, like HIV, and complications during pregnancy.

It has been shown that HIV-infected women with bacterial vaginosis

(BV) are more likely to transmit HIV to their sexual partners than those without BV. Diagnostic criteria for complications have also been associated with a female genital tract factor that induces expression of HIV.

There is an evidence of association between bacterial vaginosis and increased rates of sexually transmitted infections like HIV/AIDS. Bacterial Vaginosis is associated with upto six-fold increase in shedding of HIV. Bacterial Vaginosis is a risk factor for viral shedding and herpes simplex virus type 2 infection. Bacterial Vaginosis may increase in the risk of infection with HPV or reactivation of human papillomavirus (HPV).

In addition, bacterial vaginosis as either pre-existing, or acquired, or may increase with the risk of pregnancy complications, most notably premature birth or miscarriages. Pregnant women with bacterial vaginosis have a higher risk of chorioamnionitis, miscarriage, pre-term birth, premature rupture of membranes, and postpartum endometritis. Women with bacterial vaginosis are treated with invitro fertilization have a lower implantation rate and higher rates of early pregnancy loss [3].

## References

1. Eschenbach, David A. "History and review of bacterial vaginosis". *Am J Obstet Gynecol* 169(1993):441-445.
2. Fredricks, David N, Fiedler, Tina L, and Marrazzo, Jeanne M. "Molecular Identification of Bacteria Associated with Bacterial Vaginosis". *N Engl J Med* 353(2005):1899-1911.
3. Kurki, T, Sivonen, A, Renkonen, OV, and Savia, E, et al. "Bacterial vaginosis in early pregnancy and pregnancy outcome" *Obstet Gynecol* 80(1992):173-177.
4. McDonald, Helen Margaret, Brocklehurst, Peter, and Gordon, Adrienne. "Antibiotics for treating bacterial vaginosis in pregnancy". *Cochrane Database Syst Rev* (2007).

**How to cite this article:** Hall, Jimmy. Bacterial Infection-Bacterial Vaginosis. *J Infect Dis Med* 6 (2021) doi: 10.37421/jidm.2021.6.168

\*Address for Correspondence: Hall Jimmy, Department of Immunology, University of Massachusetts, USA; E-mail: jimmyh@um.ac.com

**Copyright:** © 2021 Hall J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 08 April 2021; Accepted 22 April 2021; Published 30 April

2021