

Introduction

Bacterial vaginosis (B.V) is a polymicrobial disorder characterized by increase in vaginal pH over 4.5, a reduction in or absence of lactobacillus colonization and overgrowth of several facultative and obligatory anaerobic bacteria (*Hay et al 1992, Guise et al., 2001*).

It is the commonest cause of lower genital tract infection among women in childbearing period, although 30-40 % of the cases are asymptomatic (*Hay et al., 1992*).

It accounts for 36 % of patients attending sexually transmitted diseases clinics & 29 % of patients attending family planning clinics and 10 – 25 % in obstetric clinics (*Thomason et al., 1990*).

Bacterial vaginosis is diagnosed in up to 23 % of pregnant women. Although B.V itself is harmless condition, it is linked to pregnancy complications including miscarriage, preterm delivery, preterm premature rupture of membrane, amniotic fluid infection, post partum infection , post C.S. wound sepsis and pelvic infection after child birth. (*Gallagher et al. 2004*).

There is an association between bacterial vaginosis and postoperative infection. 35% of women with clue cells detected in vaginal smear developed vaginal infection or wound infection after abdominal hysterectomy (*larsson et al., 1991*).

Also clinical trials demonstrated important reduction in many of these adverse events with appropriate screening & appropriate antimicrobial treatment (*Berg and Garham, 2004*).

Organisms associated with bacterial vaginosis have also been recognized as agents of female upper genital tract infection, strong evidence show that bacterial vaginosis may cause pelvic inflammatory disease in non-pregnant women in the absence of gonorrhoea and Chlamydia, consequently, bacterial vaginosis could be associated with tubal factor of infertility (*Wilson et al., 2002*).

Although bacterial vaginosis is not considered a true sexually transmitted infection, yet it is correlated with sexual activities (*Shwebke et al., 1999*). It has been suggested that the pathogenesis of bacterial vaginosis may be similar to that of urinary tract infections, with the distal intestinal tract and the mouth serving as a reservoir for some bacterial vaginosis- associated flora (*Spiegel, 1991*).

No single microorganism is detected in all women with B.V, though *Gardnerella vaginalis* (G.V.), *Bacteroides* species and *Mycoplasma hominis* (M. hominis) were detected in most studies (*Spiegel et al. 1980, Hiller et al., 1990*).

Although bacterial vaginosis is generally believed to be an endogenous condition, a number of behavioral factors are involved, such as the use of contraceptives (*Shoubnikova et al., 1997*), vaginal douching (*Ness et al., 2002*) and smoking habits (*Hellberg et al., 2000*).