

# A Bacterial MATTER

**It is not a sexually transmitted disease yet it can be caused by increased sexual activity. It is not associated with hygiene yet it can cause a malodorous discharge as a result of douching. NIPinF invites Ingrid Deutrom, sales and marketing development executive from Kora Healthcare to discuss what is Bacterial Vaginosis (BV) and why it can be an embarrassing female condition.**

Exactly how does BV infect a woman's vagina? The answer lies in a shift in the natural microflora of the vagina where Lactobacilli species predominate. Lactobacilli colonise the surface of the vaginal mucosa and convert natural lactose and other sugars to lactic acid. This maintains an acidic environment (pH4.5) in which Lactobacilli thrive and suppresses the growth of BV associated bacteria such as *Gardnella vaginalis*. Many factors such as menstruation, lifestyle, antibiotics, falling estrogen levels, IUD use, sexual activity and douching can disrupt the natural pH of the vagina leading to a decline in Lactobacilli species.

The pH of the cervical mucosa becomes raised and the BV associated bacteria proliferate producing toxins that breakdown the protective mucus layer. This leads to the production of a malodorous discharge which is usually thin, white or grey and homogenous in nature. However such discharge may initially be

confused with other conditions such as candidiasis or trichomoniasis. Simple tests can be done by the healthcare professionals to make a proper diagnosis of BV based on the following Amsel criteria (Amsel 1983)

- Thin, white homogeneous discharge
- Presence of clue cells under a microscope examination
- pH reading greater than 4.5
- Release of a fishy odour on adding 10 per cent potassium hydroxide

Although BV is not a critical condition, there is evidence that if left untreated Bacterial Vaginosis may cause serious complications such as increased susceptibility to sexually transmitted infections including HIV and is linked to complications of pregnancy including preterm birth, late miscarriage and postpartum endometritis (ref BASSH). BV has also been associated with an increase in the development of pelvic inflammatory disease (PID) following surgical procedures.

The conventional course of treatment for BV is oral Metronidazole (400mg twice daily for 7 days). Recent studies have shown an expected cure rate following primary Metronidazole treatment not exceeding 60-70 per cent after 4 weeks (Larsson 2005) with recurrence rates of 61-77 per cent within a 12 month period (Bradshaw 2006). Although the exact reasons for recurrences are not clear, there appears to be a lack of re-growth of normal Lactobacilli following treatment on Metronidazole, or there is persistence of BV-associated bacteria (Wilson 2005).

An alternative approach to antibiotic treatment is the use of a lactic acid gel to restore the natural acidic conditions of the vagina, promoting the growth of Lactobacilli, thus creating an environment less favourable to the BV-causing organisms. A lactic acid gel by KoRa Healthcare naturally restores and maintains the vaginal pH and is safe to use during pregnancy where antibiotic therapy may not be

considered suitable by a healthcare professional.

## References

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