

Bacterial Vaginosis

What is its significance in cervical smear cytology reports?

A frequent bacterial vaginosis (BV) diagnosis, or suggested BV diagnosis, in cervical smear cytology reports is a relatively recent phenomenon, and is probably a source of confusion and concern to both doctors and their patients.

In the past, the same microscopic diagnosis used to be referred to as "clue cells", and I wonder how many doctors understood the clinic significance of this pathological jargon. I have always been totally averse to pathology reports worded in jargon understandable only to pathologists rather than by the recipient of the surgical pathology report, namely, the clinician looking after the patient.

Diagnostic cytology was established and developed by cytologists with no experience of histopathology, and they invented their own nomenclature, often using Greek words, like koilocytosis and dyskaryosis, well before the underlying nature of the pathology was fully understood. Koilocytosis, for example, was coined in the 1950s and regarded as a type of dysplasia, almost 30 years before the causative Human Papilloma Virus (HPV) infection was established. At that stage, the distinction between HPV changes and Cervical Intraepithelial Neoplasia (CIN) was unknown. I personally see no point in using antiquated jargon instead of "HPV" and "CIN" nomenclature which is clearly understood by modern clinicians. The same applies, I feel, to complicated American cervical smear reporting nomenclature, which tries to sound cleverer than others, but actually achieves nothing better than simply using "HPV" and "CIN" diagnostic labels.

But let's get back to BV. This was largely unrecognised by cervical smear reporters until relatively recently. Laboratory staff were also unaware of the connection between this microscopic diagnosis and possible clinical symptoms. As laboratories increasingly diagnosed, or suggested, the presence of BV, patients and some doctors have become concerned, both about the frequency of this diagnosis, and also about its clinical significance.

Of primary importance is reassuring patients that BV is not a sexually-transmitted disease (virgins may acquire it), although it is commoner in the sexually active. It is caused by an imbalance of naturally-occurring bacterial flora, whereby normal lactobacilli are partly or completely replaced by a variety of mainly anaerobic organisms, and vaginal discharge changes from acidic to alkaline.

Bibliography

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BV is the commonest cause of abnormal discharge and up to 30% of women are thought to be affected. The prevalence in pregnant women is said to be even higher. The exact mechanisms of acquiring BV are not fully understood. Having a new sex partner, or multiple sex partners, and douching increase the risk. The mechanisms here might simply be too frequent exposure to alkaline seminal fluid, and the acidity diminishing effect of douching. Similarly, changes in hormonal status during the menstrual cycle, during the peri-menopause and menopause, and those caused by oral or intrauterine contraceptive hormones, would be expected to affect vaginal pH, and might be the triggering mechanism in these situations. In pregnancy, besides hormonal changes in the vaginal epithelium, subclinical iron deficiency anaemia might be another mechanism encouraging BV. Psychological stress has also been claimed to increase the risk.

The commonest symptom of BV is an abnormal homogenous thin whitish-grey vaginal discharge with an unpleasant fishy smell. However, most women report no signs or symptoms, while some do complain of dysuria and/or localised itching, pain and erythema, besides the foul discharge.

The possible complications of BV include increased susceptibility to sexually-transmitted infections (herpes, Chlamydia, gonorrhoea and HIV) and pelvic inflammatory disease with its possible long-term consequences (infertility and ectopic pregnancy), increased risk of infection following hysterectomy or abortion, and increased risk of preterm delivery.

But does cervical smear-reported BV require treatment? BV will sometimes clear up spontaneously, but all women with symptoms of BV should be treated to avoid complications. Male partners are said not to need treatment, but BV may spread between female sex partners.

Treatment is particularly important in pregnant women. A history of premature delivery or low birth weight should elicit an examination for BV. Some recommend treatment for BV in all women undergoing hysterectomy regardless of symptoms. Metronidazole or clindamycin are recommended for treating BV. Both can be used in non-pregnant women but caution should be exercised in pregnant ones. The recommended dosages differ in these two scenarios. BV may recur after treatment, and patients should be advised to take all the medicine prescribed even if the signs and symptoms abate.