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Bacterial vaginosis

TWO papers in the *Journal* this month report on the sensitivity and specificity of clinical and laboratory tests in the diagnosis of non-specific vaginitis.^{1,2} The differences in the titles of the papers and their approach are an indication of the continuing controversy concerning the role of bacteria in the aetiology of this common syndrome. It has been proposed that the term bacterial vaginosis be used instead of non-specific vaginitis to describe the syndrome.³ This use of the term vaginosis is a recognition that this syndrome does not appear to involve an inflammatory reaction of the vaginal mucosa but does not imply that the condition or the symptoms are trivial.

The syndrome is characterized by a typical malodorous vaginal discharge, and the presence of vaginal epithelial cells whose borders are obscured by large numbers of bacteria. These cells are referred to as 'clue' cells and can be identified on direct microscopy of wet smears. In 1955 Gardner and Dukes⁴ demonstrated that in most cases of non-specific vaginitis a Gram-positive bacillus can be isolated which has been shown subsequently to be a major component of the bacteria observed on 'clue' cells. This short bacillus was initially described as a type of haemophilus then termed a corynebacterium but is now referred to as *Gardnerella vaginalis* because of its unique characteristics.

In spite of the close association between non-specific vaginitis and *G. vaginalis* a single species aetiology is doubtful on several counts. First, *G. vaginalis* is found in apparently asymptomatic women,^{5,6} although O'Dowd and colleagues⁷ have challenged this view. Secondly, anaerobic bacteria are also associated with non-specific vaginitis and are responsible for the characteristic 'fishy' odour of the discharge which is thought to be due to the production of the amines putrescine and cadaverine.⁸ Thirdly, the high pH of the vaginal fluid, another feature of non-specific vaginitis, is likely to be due to the loss of the normal lactobacilli rather than a direct effect of the presence of *G. vaginalis*. Fourthly, volunteer inoculation only occasionally gives rise to symptoms of non-specific vaginitis if a pure culture of *G. vaginalis* is used.⁹ Finally, treatment with metronidazole is effective for non-specific vaginitis but *G. vaginalis* is relatively insensitive to this drug *in vitro*.

The normal bacterial flora of the vagina form a complex ecosystem and we should not be surprised that vaginal discharge is associated with changes in the flora which are also complex. Anaerobic bacteria, mycoplasma and other organisms, as well as *G. vaginalis* are more prevalent in women with bacterial vaginosis than in asymptomatic women. Whether *G. vaginalis* and aerobic bacilli are causative of vaginal discharge or simply accompany it remains to be clarified.

General practitioners, however, require a rational approach in their investigation and treatment of patients complaining of a vaginal discharge and in the advice they give. In many instances the diagnosis will be clear. Vaginal thrush can be diagnosed clinically and confirmed by the identification of candida on direct examination of a smear or on culture. But what should a general practitioner do when a patient complains of a thin yellowish vaginal discharge which has a 'fishy' odour? Typically, a high vaginal swab will be sent to the bacteriology laboratory where it will be subjected to routine techniques and the report will state 'no pathogens'. However, the evidence presented in the papers by Kelsey¹ and O'Dowd² and in previous studies¹⁰ suggests there is no justification for requesting laboratories to look for *G. vaginalis* on a routine basis because of the time and expense involved and because of the low specificity of the test. There does, however, seem to be justification^{1,2} for general practitioners to measure the pH of the vaginal fluid and to look for 'clue'

cells using a microscope — both simple sideroom tests. Bacterial vaginosis diagnosed on the basis of clinical examination and these simple sideroom tests should then be treated with metronidazole. Temporary eradication of *G. vaginalis* is to be expected but previous studies^{10,11} have shown a high recurrence rate.

The difficulties and uncertainties encountered in the investigation and treatment of bacterial vaginosis are similar to those which occur when considering the role of chlamydia in cervicitis and pelvic inflammatory disease. Technical developments in the bacteriological investigation of women are at present raising more questions than answers. It is to be hoped that the rapid increase in knowledge about the bacteriology of the female genital tract will soon lead to a better understanding of what is normal or abnormal.

E.G. BUCKLEY

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Living without health — a challenge to patient and doctor

CANDIDATES for elective surgery show a spectrum of behaviour. Some are motivated by a desire to be rid of discomfort or disability while there are others who do not wish to neglect themselves and imperil their families' economic and emotional security. These patients generally perceive health as a wholesome product delivered by the medical industry. At the centre of the spectrum there are patients with a temporary need to be ill or, in the terminology coined by Holmes,¹ to have an optional illness. At the other extreme there are those who refuse to have an operation, eschewing the risks involved and electing to live without health.

The concept of living without health was formulated by Barnhurst,² an articulate sufferer from a rare and unnamed but devastating disorder for which he sought aid at a number of prestigious institutions in the USA. His experience with the medical establishment over several years forced him to the conclusion that he would have to learn to deal with his illness 'at a prudent distance from medicine, even if it meant suffering more or dying sooner'. His decision seems to have been prompted more by the doctors' lack of understanding of his predicament than by their failure to find a cure. A kindred idea is that of social iatrogenesis³ where the individual's capacity to experience suffering is inadvertently or deliberately taken away.

Barnhurst² takes issue with the simplistic view, widely held in the USA, that good health can be assured by education, personal responsibility and progress, a way of looking at things that does not account for the slim and athletic non-smoker struck down by a heart attack. Barnhurst, a practising Mormon, does not believe that faith of any kind nurtures health but rather life, of which both disease and death are a part. Life goes on without regard to quality, and we do not have the right to health or the right to die.

The idea that pain may heighten one's sense of being alive and even one's creativity deserves consideration. Several theories of aesthetics subscribe to the connection between art and suf-

fering and Thomas Mann has depicted a composer who deliberately contracts syphilis because he senses that his well-springs of inspiration are drying up.⁴ Lipowski⁵ speaks of gain as a subjective component of disease, noting that the behaviour of some patients suggests that they are relieved to be ill rather than distressed.

These reflections are intended to temper the feeling of rejection a doctor may experience when he offers a patient a precise diagnosis and a reasonable chance of improvement and these are refused. An informed choice to live without health is compatible with a responsible attitude towards one's own well-being and the well-being of those one loves. In fact, Drossman's paraphrase, 'Don't just do something, stand there!'⁶ can be most aptly applied to these very circumstances.

Finally, it is important to realize that a doctor's opinion of living without health may vary enormously depending on the circumstances. Thus, the patient may be seen by the doctor as acting irresponsibly. On the other hand, if an elderly man who is regarded as a poor operative risk attends frequently because of pain in his knees he is likely to be told that there is as yet no cure for degenerative joint disease and that he will have to cope with conservative measures. This amounts to asking him to live without health and should be recognized as such.

J. HERMAN

General Practitioner, Department of Primary Care,
Ben-Gurion University, Israel

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