Correspondence

Sir,

Ching *et al* have reported that using the PEM-GVA (plastic envelope method) *Gardnerella vaginalis* was isolated from 47 of 49 (96%) of women with clinical bacterial vaginosis (BV). The PEM broth medium showed an adherence of *G vaginalis* bacteria in 75% of these patients.

Using the PEM-GVA test, we undertook a study specifically directed at further investigating the in vitro adherence of *G vaginalis* in patients with symptomatic BV. We studied 103 consecutive women attending a local health clinic. We compared the results of pelvic examinations with results of the PEM-GVA and conventional techniques. 1

Table 1 shows that *G vaginalis* was isolated from 19 (100%) women with BV and 18 (21.4%) of the remaining 84 patients, who did not have BV. Appreciable adherence, as shown in table 2, occurred in 18 (95%) of the 19 women with BV and five (6%) of the 84 other patients (p < 0.0001). Table 3 shows that appreciable numbers of clue cells were found in 16 (84%) of the 19 women with BV, and four (5%) of the 84 other patients (p < 0.0001). When appreciable bacterial adherence and clue cells were absent, results correlated best with a BV negative predictive value of 98%.

A previously unreported observation was used in this study as a possible indicator of BV, namely the presence of gas bubbles in a patient’s discharge. It was present in all the positive symptomatic confirmed cases.

In vivo adhesion of *G vaginalis* to epithelial cells may be important in the pathogenesis of BV. Whether any relation exists between the in vivo and in vitro adherence described previously is speculative. The results of this study, however, indicate that the PEM-GVA provides a rapid, sensitive, and specific method of growing *G vaginalis*.

Table 1  
Isolation of *Gardnerella vaginalis* from 19 women with and 84 without bacterial vaginosis (BV) (figures are numbers (percentages) of women yielding *G vaginalis*)

<table>
<thead>
<tr>
<th>Category</th>
<th>No</th>
<th>PEM-GVA</th>
<th>Conventional culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>BV</td>
<td>19</td>
<td>19 (100)</td>
<td>16 (84.2)</td>
</tr>
<tr>
<td>Non-BV</td>
<td>84</td>
<td>18 (21.4)</td>
<td>18 (21.4)</td>
</tr>
<tr>
<td>Totals</td>
<td>103</td>
<td>37</td>
<td>34</td>
</tr>
</tbody>
</table>

Appreciable adherence was 3+ and 4+. This system also presents the microscopic visualisation of bacterial adherence and clue cells that correlate significantly with the clinical diagnosis of BV.

Yours faithfully,

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*BS Adly*  
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References


Acute urethritis due to *Neisseria meningitidis* group A acquired by oro-genital contact: case report

Sir,

Following the recent report of urethritis due to *Neisseria meningitidis*, acquired from heterosexual oro-genital contact,1 we wish to report a similar case. A 16 year old schoolboy was referred by his GP in January 1989. He gave a history of pain in the left iliac fossa radiating to the groin for one day. He denied any urethral symptoms, and maintained that he had never had sexual intercourse. There was no significant past medical history. On examination he had a tender swelling adjacent to the left testicle and a profuse purulent urethral discharge. Gram negative intracellular diplococci were present on urethral smear.

A presumptive diagnosis of gonococcal urethritis and epididymitis was made and he was treated with 2 g intramuscular spectinomycin and a two-week course of doxyce-
Importance of Gardnerella vaginalis as an aetiological agent in bacterial vaginosis.
K A Borchardt, B S Adly, R F Smith, J Eapen and C B Beal

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