Acute myeloid leukaemia in a patient with congenital antithrombin III deficiency

Congenital antithrombin III deficiency is well recognised as a rare cause of venous thrombosis. The occurrence of acute myeloid leukaemia in a patient with congenital antithrombin III deficiency has not previously been reported.

A 45 year old woman presented in July 1982 with a five week history of tiredness, spontaneous bruising, and gingival swelling. She had a history of postoperative venous thrombosis on two occasions and a striking family history of thrombotic disease: her father and paternal uncle had had major thrombotic episodes while in their twenties. The maternal side of the family was unaffected.

Dr Kaye comments as follows: The confirmation by Dr Van de Vyver and co-workers that aluminium can be demonstrated in marrow cells using the aluminium stain and verified using a microrpbe analytical technique is gratifying. The combined storage of iron and aluminium is not unexpected, although it was not seen in our material. This is probably because our patients tend to be kept mildly iron deficient and marrow iron stores are usually meagre. One of our patients with clinically severe aluminium bone disease was treated with desferoxamine for 8 months, after which a repeat bone biopsy showed disappearance of trabecular calcium staining but persistence in the marrow, implying different chemical reactivity of aluminium in the two sites.

I have not systematically looked at the reason(s) for the apparently less satisfactory staining in aluminium methacrylate or epon embedded material and this could be due to fixation or other factors. Whatever the explanation it is further evidence of a difference between the reactivity of the marrow and mineral aluminium deposits.

The authors observations are very interesting and amplify the results previously reported.

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Division of Nephrology,
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Isolation of Gardnerella vaginalis from women attending gynaecological clinics and general practice surgeries

It is now recognised that Gardnerella vaginalis probably plays a part in the causation of non-specific vaginitis. The association with various anaerobic species has already been noted. Clinical symptomatology is not an adequate indication of the diagnosis of non-specific vaginitis; careful observation of the character of the vaginal discharge is needed, together with measurement of vaginal pH and microscopy for leucocytes, "clue cells," and Gram variable cocccobacilli. This is probably best carried out in the special clinic, but the following study was conducted in a district general hospital, showing the problems which may be encountered and the contribution which may be made in a routine microbiology laboratory.

We examined specimens of vaginal discharge from 74 patients from whom no other vaginal pathogen had been isolated. Thirty two of these were seen in a gynaecological outpatient clinic complaining of vaginal discharge (group 1). The remainder (42) were asymptomatic women attending a family planning clinic for routine cervical cytology (group 2).

Specimens of vaginal discharge were obtained at vaginal examination and placed immediately in 1 ml of prereduced thioglycollate USP Medium (Oxoid). The vaginal pH was measured with pH paper. A swab was also obtained, from which a Gram stain was prepared. Culture for anaerobes was carried out using standard methods. G vaginalis was isolated and identified according to the methods of Taylor et al10 (except in addition to 20 mg/l nalidixic acid, the selective medium contained 2 mg/l gentamicin, 2 mg/l amphotericin, and 125 mg/l sulphadiazine) and Taylor and Phillips11.

High vaginal swabs in transport medium from a third group of 28 general practice patients with vaginal discharge were also cultured for G vaginalis because Gram staining showed the presence of clue cells, Gram variable cocccobacilli, and absence of pus.

The results are shown in the Table. Measurement of pH was found to be unreliable in the clinic and did not correlate well with results. There was no significant difference between the numbers of isolations of G vaginalis in group 1 and group 2 (x² test). Anaerobes, however, were isolated significantly more often in group 1 (p < 0.01). Thus symptomatic vaginal discharge was not associated with isolation of G vaginalis. Microscopy of specimens from three patients showed a gross excess of leucocytes; one of these was from group 1 and two from group 2. Anaerobes were isolated from one of these but G vaginalis was not found. The remaining 71 patients had either small numbers of leucocytes or no pus in their vaginal secretions.

These patients therefore fulfil some of the criteria for the diagnosis of non-specific vaginitis according to Tabaqchali et al. Only 40, however, fulfilled the criteria of Gram positive cocci with a "clue cell" present. Our isolation rate of 8/71 (11.3%) for G vaginalis is considerably lower than that of Tabaqchali (57%); however, it must be remembered that 40 of these 69 patients were not complaining of any symptoms.

G vaginalis was isolated from 15 anaerobes and from 10 of the general practice patients. This reconfirms the reliability of Gram staining as an indication of the presence of G vaginalis and also shows that ordinary high vaginal swabs in transport medium give satisfactory recovery rates. In fact, the isolation rate in this group (54%) was much closer to that of Tabaqchali, suggesting that, in our hands, this method gave better results that the use of prereduced broth as a transport medium.

When we consider all 102 patients from whom cultures were obtained there is a significant association between the isolations of G vaginalis and anaerobes; G vaginalis alone was isolated from 12 patients, anaerobes alone from 14, and both from 12.

It is clear that the association of G vaginalis and anaerobes with non-specific vaginitis is complex, and that clinical symptomatology is no guide to subsequent isolation. Our study has shown, however, that G vaginalis may be satisfactorily isolated from general practice patients without complex collection methods. Some simple guidelines on the relevance of G vaginalis for general practitioners and routine microbiological laboratories are needed.

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<th>Patients</th>
<th>Isolations</th>
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<tr>
<td></td>
<td>G vaginalis only</td>
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<tr>
<td>Group 1 (n = 32)</td>
<td>2 (6%)</td>
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<tr>
<td>Group 2 (n = 42)</td>
<td>3 (7%)</td>
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