Letters to the Editor

pective, controlled study, we found that nitrofurantoin, administered orally from the first postoperative day until the catheter was removed, was highly effective in preventing bacteriuria in patients who had come to operation with uninfected urine.⁸

In conclusion, we agree a knowledge of the prevalent bacteria in urinary infection is helpful but to rely on this alone in selecting agents to prevent postoperative septic complications is insufficient and may be dangerous.

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Dr Williams comments as follows:

While agreeing that detection of bacteriuria and its treatment with an appropriate antibacterial agent at or before pre-medication is important, I cannot accept that this is an over-riding consideration. Admission procedures in some Units^{1,2} make this difficult to achieve and, as Gil-

lespie *et al* state themselves, septicaemia also occurs in patients developing bacteriuria after operation; in Glasgow, bacteriuria arising postoperatively was more common than preoperative bacteriuria.³

Lengthy therapeutic courses of treatment are probably more likely to give rise to organisms resistant to multiple agents than short courses of chemoprophylaxis.⁴ If it is accepted that infection may occur after screening, or that screening may not be complete by the time of operation, then it is important to use a systemic agent which is effective "therapeutically" as well as "prophylactically". Obviously no pre-determined drug or drugs can be relied upon to cope with every instance but our study³ assists a choice.

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Detection of bacterial antigens in cerebrospinal fluid

We read Dr Tompkins' article on the detection of bacterial antigen in cerebrospinal fluid (July 1983) with interest.¹ Whilst agreeing that the coagglutination (COA) test does have advantages over counterimmunoelectrophoresis in terms of speed and ease of carrying out the test, we do have some reservations in the light of our recent experience. We examined specimens of CSF from two patients with meningitis, in both cases abundant polymorphs and Gram-negative diplococci were seen and *Neisseria meningitidis* (group B) was obtained on culture. The Phadebact COA test was carried out on the fresh CSF according to the manufacturer's instructions. In neither case did the COA test detect meningococcal antigens. In con-

trast, testing the same specimens by CIE enabled us not only to detect meningococcal antigen but also to group the meningococci. This discrepancy is undoubtedly a reflection of the quality of the antibody used, perhaps that used in the Phadebact system should be replaced by one of higher affinity.

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Reference

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Freeze dried cryoprecipitate and home therapy

The paper by our colleagues Hambley *et al*¹ on freeze dried cryoprecipitate contains some reservations on its suitability for home therapy of haemophiliacs. Although the product used in this trial was recommended for reconstitution in 100 ml, it does reconstitute rapidly in 50 ml distilled water. The 860 units used per patient could easily be given in a total volume of as little as 100 ml.

The preparation procedure of the newer batches was modified to provide a more concentrated product with an average dose of 430 IU per bottle in a volume of 50 ml.² Twelve batches of NHS intermediate FVIII concentrate recently used in this region had between 190 and 380 IU FVIII per bottle. Reconstitution volumes ranged from 20 to 50 ml with a final FVIII concentration of 7.6-12.8 IU/ml. The equivalent of 860 IU (two bottles of dried cryoprecipitate) used in this study could therefore have been given as three or four vials of intermediate concentrate in a final volume ranging between 67 and 113 ml depending on the batch in use. The other dose of 500 IU in 20-30 ml mentioned in the discussion of the paper could only be provided by a higher purity concentrate with a potency around 20 IU/ml.

An additional feature of dried cryoprecipitate, not mentioned in the paper, is that it is a small pool product and we believe like many others^{3,4} that its use reduces the rate of exposure to hepatitis

viruses and other transmissible agents. This particular feature is most relevant, now that acquired immune deficiency syndrome is emerging as a recent addition on the list of unresolved problems in haemophilia.^{5,6}

We therefore feel that dried cryoprecipitate is quite valuable for home therapy. It has distinct advantages for patients with mild and moderate FVIII deficiency, for paediatric patients and severe haemophiliacs with minor bleeds. It can be prepared for administration in a suitable small volume, and it may even be more convenient for the patient on home therapy to reconstitute 800 IU in two bottles than to reconstitute and pool four bottles of intermediate concentrate.

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- ⁴ Woods KR, Horowitz B. International Forum. *Vox Sang* 1980;**38**:113-7.
- ⁵ Desforges JF. AIDS and preventive treatment in haemophilia. *N Engl J Med* 1983;**308**:94-5.
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Dr Hambley and colleagues comment as follows:

We would like to comment on the two points raised by Gabra and Mitchell in their letter.

Freeze-dried cryoprecipitate is a small pool product and as Gabra and Mitchell state reduces exposure to hepatitis viruses and probably to the transmissible agent of acquired immunodeficiency syndrome. We believe that the advantages of small pool products have been known for a considerable time and do not require lengthy reiteration.

As to the volume of the reconstituted product our practice was to reconstitute the product in the manufacturer's recommended volume of 100 ml. We are

delighted to read that Gabra and Mitchell have modified their manufacturing process to enable the product to be reconstituted in a small volume and await, with interest, the publication of the details of the modified process.

As we stated in our original article, the volume of the reconstituted product is a minor disadvantage for home therapy: 1000 IU of factor VIIIc in the form of freeze-dried cryoprecipitate would have required the infusion of 300 ml of the reconstituted product and in terms of home therapy, must be considered a minor disadvantage.

We believe that freeze-dried cryoprecipitate has an important role to play in the management of the haemophiliac population in view of its excellent manufacturing characteristics—that is, low relative cost, simple equipment and high yield and, in our hands, good clinical performance—that is, efficacy and high recovery. We await the opportunity that further supplies of freeze-dried cryoprecipitate would give to use this excellent product.

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Notice

Society for Cutaneous Ultrastructure Research

The 11th Annual Meeting of the SCUR will be held at Helsinki University, Finland, from 17-20 June, 1984. Dermatologists, pathologists and other interested scientific workers are invited to participate. For details and registration forms please write to: Dr. Kirsti Maria Niemi, Secretary of the Organising Committee, Department of Dermatology, Helsinki University Hospital, Snellmaninkatu 14, Helsinki 17, Finland.