- (4) Tetracyclines. It is recommended that, given parenterally, "the total dose should never exceed 1 g in 24 hours (less in patients with impaired renal function) because of the danger of liver damage.' Nothing whatever is said in this section about the anti-anabolic action of these agents and other possible effects on the kidney, which have led the authors of at least three standard texts,2-4 to interdict the use of tetracyclines altogether (with the exception of doxycyline) in patients with impaired renal function.
- (5) Fusidic acid (Fucidin) is stated to be "active against a wide spectrum of organisms." How can fusidic acid possibly be described as a wide-spectrum drug? All "coliform" organisms are resistant to it, and even in the Gram-positive range its activity against the pneumococcus and other kinds of streptococci is poor.
- (6) The section ends with some advice on the choice of drugs for various infections, among them acute meningitis and peritonitis. The paragraph describing the chemotherapy of meningitis caused by "coliform" organisms is written in a particularly confusing way. At one point, dealing with the treatment of pyocyaneus (sic) meningitis in an infant, the author could be read as saying that though gentamicin is the drug of first choice chloramphenicol and kanamycin are permissible alternatives. For the chemotherapy of peritonitis when no bacteriological information is available ampicillin is said to be "the drug most likely to be effective." The blind chemotherapy of peritonitis is a highly debatable topic, but there is one point at least on which I think there would be wide agreement and that is that ampicillin, if given alone, is not the drug most likely to be effective in this condition.

Considerations of space forbid me to make more than a selection of the criticisms which might be levelled at this section of the B.N.F., which I suggest is in urgent need of revision. The prospect of its use until 1976 by any who are inexperienced in this field is one that I find alarming.—I am, etc.,

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- 1 British National Formulary 1974-76, pp. 94-110.
  London British Medical Association and Pharmaceutical Society of Great Britain, 1973.
  2 Kucers, A., The Use of Antibiotics, pp. 146, 288.
  London, Heinemann, 1972.
  3 Garrod, L. P., Lambert, H. P., and O'Grady, F., Antibiotic and Chemotherapy, 4th edn., p. 157. Edinburgh and London, Churchill Livingstone, 1973.

p. 157. Edinburgn Livingstone, 1973.
4 de Wardener, H. E., The Kidney, 4th edn., p. 312. Edinburgh and London, Churchill Livingstone, 1973.

## Isolation System for General Hospitals

SIR,—Dr. A. G. Ironside (1 June, p. 501) poses the rhetorical question whether "dermatitis with severe sepsis [is] more infectious than any other wound or burn infection." In fact for many years infected, non-surgical skin lesions have been recognized to be a peculiarly dangerous source of hospital cross-infection. Numerous demonstrations of this can be found in the literature. For example, 14 patients died as a result of the admission of a patient with skin sepsis to a medical ward1; and similar catastrophes have occurred in surgical wards.2

The bacterial contamination of the hospital environment by patients with infected dermatological lesions can be truly prodigious.3 It is important, however, to note that similar bacterial dispersal can follow simple colonization of lesions with Staphylococcus aureus, Streptococcus pyogenes, or Gram-negative bacilli such as Proteus vulgaris and Pseudomonas aeruginosa.4 Though eczema with clinically apparent infection is rightly regarded as a particularly dangerous hazard in hospital, experiments on bacterial dispersal from individual patients have shown that clinically non-infected conditions, notably psoriasis, are the sources of some of the highest air counts.4 This is a reflection of the greatly increased turnover of the epidermis and the production of profuse air-borne squames in such diseases.

The traditional practice of nursing dermatological patients in surgical wards is now clearly indefensible. Many cases of postoperative sepsis over the years have been due to this form of negligence. But the risks of treating skin patients in general medical wards are also considerable. Whenever possible, patients with extensive skin disease should be nursed in single-bedded rooms with exhaust ventilation. The practicability of converting existing ward accommodation to house dermatological cases at only modest expense has been shown at Westminster Hospital. For a medium-sized general hospital suitable facilities for seven or eight patients should be adequate. In the absence of suitable accommodation the minimum requirement is that the lesions of dermatological patients should be declared bacteriologically safe before admission to an open ward. Further bacteriological examination is essential during each patient's stay since skin lesions readily become colonized with pathogens in hospitals.4—I am, etc.,

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Vogel, R. A., et al., New England Journal of Medicine, 1959, 261, 1301.
 Barber, M., and Dutton, A. A. C., Lancet, 1958, 2, 64.

464.
 Selwyn, S., Journal of Hygiene, 1965, 63, 59.
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## A Case of Pyrexia of Undetermined Origin

SIR,—I would like to suggest another possible, if unlikely, condition to explain the P.U.O. in the patient considered in a recent Clinicopathological Conference (20 April, p. 157). This is the protozoal disease babesiosis, which many features in the patient's illness might suggest.

- (1) She spent her holidays in a caravan in Devon, where "red water fever" in cattle occurs and ticks transmitting the infection are ubiquitous. In the only other human case of babesiosis in the British Isles the patient contracted the disease on a caravan holiday under similar circumstances Ireland.
- (2) Haematuria is a cardinal feature in babesiosis.
- (3) Splenomegaly and anaemia are characteristic features in babesiosis.
- (4) The P.U.O. which failed to respond to medication would favour a babesial infection not treated appropriately.
- (5) Finally, the failure to see Babesia parasites in the blood film would not exclude

the infection; after the acute stage parasitized red cells may be extremely few and very difficult to find.

Babesia sp. is probably the most widely distributed blood parasite in mammals throughout the world and the sources of infection are therefore equally ubiquitous. In the British Isles alone Babesia sp. is found in bovines, rodents, insectivora, and chiroptera. Nevertheless, my observations do not profess to have cleared up this problem but only suggest one further line of research which might have been followed in an otherwise extremely thorough investigation of a very puzzling case which under the circumstances must remain a case of P.U.O.—I am, etc.,

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## The Coroners' So-called 24-hour Rule

SIR,—There has been and still is a general belief among medical staff of junior and senior grades that patients dying within 24 hours of admission to hospital are "cases to be referred to the coroner." Even in 1974 this view obtains, as is confirmed by answers given by postmortem room technicians in many parts of the country to a recent examination question on the kinds of cases referred to the coroner.

This belief is erroneous. The Human Tissue Act 1961 contains specific provisions relating to postmortem examinations and section 2(1) affords clear permission for such an examination to be carried out on any patient to establish or confirm the causes of death.—I am, etc.,

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## Anticonvulsant Osteomalacia and Vitamin D

SIR,-Mr. D. J. F. Rowe and Dr. T. C. B. Stamp (2 March, p. 392) make some critical comments on our paper on anticonvulsant osteomalacia (22 December 1973, p. 695). Contrary to their previously expressed opinions they now seem to believe that epileptics on anticonvulsant therapy do not have osteomalacia but osteoporosis, though they do not give any direct evidence to support this statement. Their arguments are: hypocalcaemia is seen without other biochemical changes and without histological sign of osteomalacia; mean levels of alkaline phosphatase of bone origin are no higher in adult epileptics than in normal adults; the low levels of bone mineral content (B.M.C.) found with our method can be caused by osteoporosis, since the method cannot distinguish this condition from osteomalacia; and the effect of treatment with vitamin D<sub>2</sub> (not vitamin D<sub>3</sub>, as incorrectly stated by Mr. Rowe and Dr. Stamp) observed by us is at variance with the results of calcium balance studies.

The fact that hypocalcaemia is common in epileptics in the abscence of histological bone abnormalities may be due to bone biopsy being a rather insensitive method for estimating osteomalacia in its milder forms. As to our findings of elevated serum alkaline phosphatase levels, we should like to draw attention to the fact that three years previously Mr. Rowe, together with Dr. A. Richens,1 reported that 18 (38%) out of 47