It has been studied in two formal, randomised trials.^{4, 5}

As well as having ideal physical properties for such a dressing, it is outstanding in relation to simplicity of application and the patient's comfort. In our experience 90% of patients are unable to manage their own dressing changes in their own homes, so that they have the frequent wound cleansing necessary for optimal healing yet require supervision only at weekly intervals. This saving of hospital beds and nursing time, combined with the low cost of the dressing (which is considerably cheaper than a week's supply of gauze packing), results in a major saving for the National Health Service.

We believe it to be no exaggeration to describe this dressing as revolutionary, not only in its physical properties but also in its advantages to the patient and the Health Service, and as such it deserves a mention in a leading article written five years after its introduction.

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¹ Turner, T D, *Pharmaceutical Review*, 1972, **222**, 421.
² Wood, R A B, and Hughes, L E, *British Journal of Surgery*, 1974, **61**, 921.

³ Wood, R A B, and Hughes, L E, *British Medical Journal*, 1975, **4**, 131.

⁴ Wood, R A B, Williams, R H P, and Hughes, L E, *British Journal of Surgery*, 1978, **65**, 554.

⁵ McFie, J, and McMahon, M J, *British Journal of Surgery*, in press.

SIR,—Your leading article (22 September, p 689) highlights a problem in medicine that has until recently attracted too little attention. The reasons for this seem to be inherently connected with difficulties in devising suitable, reproducible methods of measurement of wound healing in clinical practice.

The purpose of a wound dressing was taught to me to be twofold: (a) to cleanse the wound and (b) to protect it from (further) contamination. That the dressing should also protect clothing or bed linen was not discussed so far as I remember. In addition to your criteria for the physical attributes of a dressing, Scales in 1963 drew up a list of criteria for the ideal dressing, including absorption of exudate, removal of bacteria, the possibility of evaporation, and resistance to incorporation in eschar. Obviously lack of toxicity, ease of application and removal, and cheapness should also be considered.

Workers in the USA² have stressed the importance of capillarity in dressings. Rothman³ in Sweden, in experiments on chromatography in wounds, showed that continuous drainage of exuding wounds was possible and his work led to the development of dextranomer (Debrisan, Pharmacia), which fulfils many of the requirements you set out. It is a stable, non-adherent contact layer that allows a humidity gradient (so long as the layer is not fully saturated) and not only absorbs fluid but transports particulate matter and micro-organisms through the layer, concentrating them in the part of the layer furthest from the wound's surface by "reverse gel filtration." It is non-toxic, and used correctly has even shown itself to be cost effective.

Dextranomer has in controlled clinical trials (for example, that of Groenewald⁴) been shown to cleanse wounds, stimulate granulation, and remove bacteria. Those carrying out trials

have, however, been content to limit their comparisons to dextranomer and other wound treatments. Perhaps more studies should be made to compare dextranomer with other types of dressing. Few, if any, agents available combine dextranomer's effects on wound healing with its properties as a dressing.

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¹ Scales, J F, *British Journal of Industrial Medicine*, 1963, **20**, 82.

² Noe, J M, and Kalish, S, *Surgery, Gynecology, and Obstetrics*, 1976, **143**, 454.

³ Rothman, U, *Svensk Kirurgi*, 1974, **31**, 1.

⁴ Groenewald, J H, *South African Medical Journal*, in press.

SIR,—Your leading article (22 September, p 689) rightly draws attention to the continued unsuccessful search for a satisfactory dressing for the treatment of open wounds.

Reduced to the simplest terms, the open wound presents the problem of providing a dressing which will most closely provide a temporary substitute for normal skin cover until healing is achieved, either by natural or by surgical methods. Exposure of the wound with the formation of a surface coagulum, which forms a natural biological dressing, as you mention, proved to be a notable advance in the management of raw surfaces of burns but is not always apposite. Further developments of this line of approach has led to a great deal of research and endeavour in the production of a suitable biological dressing, but this aspect is not even considered in your article.

Although the provision of temporary skin cover by the use of viable skin homograft (fresh, preserved, tissue-typed, or random) is technically feasible, preparation of this material requires expensive and complex back-up facilities and for other reasons can be undesirable. However, lyophilised skin, which presents no storage problems, has repeatedly been shown to be a highly effective temporary skin substitute, providing an effective seal of the wound against fluid loss and the ingress of infection, with less scarring subsequently if the healing is by regeneration and a better bed for autografting if this is necessary. The method has been described in detail¹ and the material, in the form of lyophilised porcine skin, is produced commercially by Ethicon Limited under the name Corethium. Further work on the technology of dressing wounds with amnion shows particular promise. These biological materials in my view show far greater promise than the use of dressings of man-made materials and surely at least deserve a mention.

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¹ Hackett, M J, and Bowen, J, *British Journal of Surgery*, 1974, **61**, 427

Complication of acupuncture

SIR,—I was recently called to see a patient who told me over the telephone that she had filled both her shoes with blood. When I arrived at the house, she was lying on the floor with both legs elevated and no sign of active bleeding. As there was no varicose ulcer or other obvious cause of the bleeding I was at a loss to explain where the blood had come from, as there was nothing to see. Both shoes had a fair coating of blood in the soles. On direct questioning about

possible causes, she admitted that one week previously she had had acupuncture performed on both ankles for her asthma and this bleeding was a simultaneous bilateral secondary haemorrhage from the acupuncture sites. I do not know if anything similar has been reported before but felt that it was sufficiently interesting to bring to your attention.

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Serum thyroglobulin in differentiated thyroid cancer

SIR,—We read with interest the recent paper by Dr Serge C Ng Tang Fui and others (4 August, p 298) on serum thyroglobulin concentrations in the follow-up of patients with papillary and follicular thyroid carcinoma. Although we agree that serum thyroglobulin is a sensitive tumour marker in "almost all" patients with differentiated thyroid cancer we have reservations about the conclusion that a whole-body radioiodine scan is unnecessary when the serum thyroglobulin is undetectable.

Of the 11 patients found by Dr Ng Tang Fui and others to have both undetectable thyroglobulin levels and negative whole-body scans there was one who showed at one year "a slight recurrence" of radioiodine uptake in the neck. Schlossberg *et al*¹ have also described a patient who, despite having an undetectable serum thyroglobulin level, showed persistent radioiodine uptake both in the thyroid bed and at the angle of the mandible.

In these two recent series radioiodine scanning demonstrated functioning thyroid tissue in 4% of patients with undetectable thyroglobulin levels. Had both methods of surveillance not been employed then these patients might have been wrongly considered free of disease. For this reason, and until the natural history of thyroid cancer patients with undetectable thyroglobulin is established, we are unconvinced that the practice of radioiodine scanning should be abandoned as part of the routine follow-up in this type of patient.

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¹ Schlossberg, A H, Jacobson, J C, and Ibbertson, H K, *Clinical Endocrinology*, 1979, **10**, 17.

Revised consultant contract

SIR,—Discussing the new contract Mr A H Grabham (15 September, p 684) states that if the proposals were accepted divisions between consultants would be eroded. However, more would be created with five groups emerging. Whole-timers would be divided into those who did or did not do private practice, and those not so coerced might get the extra non-superannuable session awarded "exceptionally and on a strictly temporary basis." The other two groups would compose the 9/11ths and 10/11ths contract. Hardly an erosion of divisions?

Whole-time consultants who will do private practice will glean their increased remuneration at no cost to the Health Service. The checking or audit of accounts to see that the 10% limit is not exceeded is invidious and does not apply to the 10/11ths contract; it is possible here to increase private earnings at no risk to contractual sessions. Is this fair?