

(1) Aplasia following irradiation accidents where any single dose received was above 400 r, since the risk of death is greater than 50% above this level.¹

(2) Post-hepatitis aplasia. The mortality of this severe marrow depression is in the region of 10%,² and marrow transplantation has been successful in two recently reported cases.^{2,3}

(3) In severe aplasia when an identical twin donor is available, since marrow can be transfused without pre-graft immunosuppression and graft-versus-host disease does not occur.

(4) Children with aplasia seem to have a much better chance of a successful graft than do adults. In Storb's series of 24 patients⁴ a successful graft was obtained in seven of nine patients under 16 years of age compared with four of 13 aged 17 years and older. Furthermore, the encouraging figures that Storb presents represent results of transplantation in patients who had not been supported by full conventional treatment—half the patients had bacterial infections at the time of admission and most had received frequent transfusion therapy, both these features prejudicing the successful outcome. As Storb points out, early transplantation before major infection and refractoriness to platelet transfusions occur would offer much better results.

Now that more is known about the problems of graft rejection and graft-versus-host disease in man it seems right to be optimistic about the future of bone marrow transplantation in aplastic anaemia, and it is to be hoped that this procedure will be applied more often in appropriate cases.—I am, etc.,

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¹ Mathé, G., Amiel, J. L., and Schwarzenberg, L., in *Bone Marrow Transplantation and Leucocyte Transfusions*, p. 133. S. Springfield, Thomas, 1971.

² Camitta, B. M., et al., *Blood*, 1974, 43, 473.

³ Royal Marsden Hospital Bone Marrow Transplant Team, *British Medical Journal*, 1974, 1, 36.

⁴ Storb, R., et al., *Blood*, 1974, 43, 157.

Idoxuridine in Herpes Zoster

SIR,—Dr. R. Dawber's paper (8 June, p. 526) in which he describes a double-blind trial of 5% idoxuridine dissolved in dimethyl sulphoxide (DMSO) topically applied at intervals to the visible lesions in zoster is interesting. However, statements are made in the paper which are inaccurate and must be challenged.

There is little basis for the postulate that "these results broadly agree with those of others." After we first showed that the relatively insoluble idoxuridine could be dissolved in DMSO and that the solution penetrated the skin and was active against herpes simplex virus,¹ we used intermittent topical application of a 5% solution to zoster. We applied it to the whole of the affected dermatome, not just to the visible lesions. Zoster, after all, is an affliction of the whole nerve, not just the skin.² We hoped that not only the visible skin lesions but most of the affected nerve would be reached. While most patients benefited, some did not, though our results were better than Dr. Dawber's. The reasons for proceeding to trial of a higher concentration of idoxuridine (40% in DMSO continuously applied) are given in

the paper Dr. Dawber cites.³ The results were much better; the pain lasted for a much shorter time (median 2.5 days) and, what is more important, this treatment was successful in nearly all cases. We did not "suggest" that 40% idoxuridine in DMSO continuously applied for four days was superior to 5% intermittently applied, we showed that this was so ($P < 0.00001$).

We have since carried out double-blind trials of 40%, 20%, and 5% idoxuridine in DMSO continuously applied, and found that 20% and 5% were significantly inferior to 40%. There was, however, no significant difference between 40% and 35% solutions. We have treated over 1,000 patients with 40% and lately 35% idoxuridine in DMSO continuously applied. Analysis of the results in 300 cases confirms the predictions of the trials. The median duration of pain was three days; 95.9% had pain for seven days or less, 79.6% for four days or less, and 45.0% for two days or less. Of the 4.1% who had pain for more than seven days, only one had pain lasting for as long as 30 days. Of the 300 31 got marked erythema and two weals from the DMSO. There was no "maceration" of the skin which we are falsely credited with having described in the treatment of zoster.

We have monitored our patients carefully for evidence of side effects on hepatic, renal, and bone-marrow function and on the eyes and found none. The statement that idoxuridine in high concentrations should "be reserved for life-threatening conditions such as herpes simplex encephalitis" is misleading for there is no sound evidence that intravenous idoxuridine has any consistent effect on herpes simplex virus encephalitis. In view of the variety of toxic effects and the relative difficulties of preparation of intravenous solutions of idoxuridine we and others now use cytosine arabinoside for this purpose.—We are, etc.,

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¹ MacCallum, F. O., and Juel-Jensen, B. E., *British Medical Journal*, 1966, 2, 805.

² Esiri, M., and Tomlinson, A. M., *Journal of the Neurological Sciences*, 1972, 15, 35.

³ Juel-Jensen, B. E., et al., *British Medical Journal*, 1970, 4, 776.

SIR,—Dr. R. Dawber's trial (8 June, p. 526) included patients from the age of 12 years upwards. Since herpes zoster in young people is a very mild illness with practically no pain and never followed by post-herpetic neuralgia, I think it is wasteful to treat such patients with anything more than the simplest of measures.

Dr. Dawber does not seem to have encountered any patients with post-herpetic neuralgia, even in the controls; the longest mean (\pm S.E.) duration of pain is recorded as 19.5 ± 1.0 days. Since the report does not reveal the age distribution of the cases we really do not know how many elderly people (over 60 years) were included in the trial, and it is in this age group that post-herpetic neuralgia is a common complication.

Finally, it would have been of interest to know the segmental distribution of the lesions and particularly how ophthalmic herpes was treated.—I am, etc.,

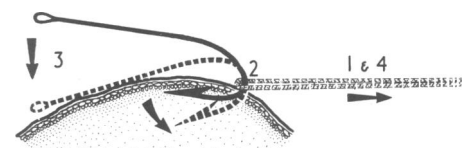
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Removal of Fish-hooks

SIR,—The fishing season is now here and with it the inevitable increase in requests for the removal of fish-hooks from various parts of the body. The usual method for removing these hooks in casualty departments is to infiltrate the area with local anaesthetic, push the barb through the skin, cut off the barb, and remove the remainder of the hook. There is, however, a quick and effective method for removing hooks by using a piece of string. I do not think it is well known but as it saves time and trauma and can be done at the water's edge (as I did today) I think it could be more widely used.

The method is illustrated in the figure:



(1) A piece of string about a yard (or a metre) long is tied to form a loop. (2) The loop is passed over the hook and held as close to the skin as possible with the index finger of the left hand. (3) The middle finger and thumb of the same hand depress the eye end of the hook, which disengages the barb and ensures that during removal the flat outer edge of the hook presses against the skin. (4) The string is taken in the right hand and given a sharp pull with a good follow-through and the hook is removed through its point of entry. Advice to have a tetanus toxoid injection is a sensible precaution. I have used this method many times and large hooks are as easily removed as small ones. Its adoption may help our overworked casualty officers, as any doctor can use this "magic" string whenever a small boy, on the beach or by the river, asks, "Please, sir, can you take hooks out?"—I am, etc.,

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Serum Hepatitis Associated with Repeated Acupuncture

SIR,—The following report of a case of serum hepatitis after acupuncture draws attention to the possibility of this association. I understand that the needles used were sterilized by dipping them in a 1 in 20 solution of tincture of calendula (marigold flowers).

The patient, a woman aged 28, stated that she had had acupuncture every two to three weeks for the past year for the following conditions: periodic bouts of depression, acute bronchitis, acute coryza and sore throat, vaginal thrush, and "strained arms." When she acquired gonorrhoea, however, she was treated with penicillin. She also smoked cannabis and occasionally consumed enough alcohol to make herself frankly drunk. Two days after her last acupuncture session she complained of abdominal colic and loss of appetite and noticed that her urine was very dark and her stools pale. When admitted to hospital eight days later she was apyrexial, jaundiced, the liver was just palpable, and there were a few fading macular lesions on the forearms. The biochemical findings were those of acute