a place where non-interventional intracranial care was practised. And such places would not have been virtually extinguished.

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1 Butler NR, Bonham DG. Perinatal mortality. Edin.

Immunisation, rehydration, and transfusion

Sir,—Dr Katherine Elliott reminded us of the importance of devising simple practical solutions to the common medical problems in areas without high technology medicine (5 May, p 1364). I was, however, disappointed in the cursory approach to blood transfusion. Several misleading suggestions were made. The use of dried plasma has been largely discarded because of its hepatitis risk and inconvenience. It has been replaced by “plasma protein fraction” which is expensive and often in short supply. Synthetic plasma substitutes such as dextrans and gelatines may be more suitable for treating burns or moderate blood losses.

Blood transfusions for severe haemorrhage will be universally required. The staff involved, however, require appropriate knowledge of the rudiments of blood bank organisation and serology and also training in simple reliable techniques for grouping and compatibility testing. The difficulties in screening for transmissible blood born diseases will restrict transfusion to obvious life saving attempts. Blood collected from donors requires careful anticoagulation, and containers suitable for other intravenous fluids will not readily be adaptable. Plastic packs prefilled with sterile preservative anticoagulant solution are the only practicable option. Current anticoagulant formulations allow at least 35 days refrigerated storage. Specifications need to be redefined in terms of cost benefit relations and conditions of use appropriate to the country concerned.

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Late mortality after vagotomy and drainage for duodenal ulcer

Sir,—Mr P C H Watt and others (5 May, p 1335) have found that colorectal carcinoma is significantly increased after gastric surgery. We recently carried out a retrospective case control study of 289 patients with a histological diagnosis of colorectal carcinoma and a similar number of age and sex matched hospital controls.

Significantly more patients with colorectal carcinoma (n=27) had undergone gastric surgery compared to the controls (n=13: McNemar’s test $\chi^2=4.7$, p < 0.05). The prevalence of peptic ulceration shown endoscopically or radiologically was similar in both groups (37 versus 30 respectively). Our study suggests that it is the gastric surgery itself and not the ulcer diathesis or the smoking habits of these patients which predisposes them to colorectal carcinoma.

Bile salts have a promising effect on colorectal carcinoma, and there is altered bile salt metabolism and increased flow of bile salts through the colon after gastric surgery. Alteration in bile salt metabolism could be the cause of the increased incidence of colorectal carcinoma seen after gastric surgery for peptic ulceration.

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Treatment of myopia

Sir,—I should like to present an alternative view of the treatment of myopia to that of Mr Patrick Trevor-Roper (17 December, p 1822).

Myopia is the most prevalent eye disease, and the third commonest cause of blindness, in the developed world. In the United States alone some 42% of people suffer its inconvenience and complications. Typically it arises in childhood, but its complications present in adulthood. It plays a part in the aetiology of 95% of cases of retinal detachment, and nearly 20% of its sufferers develop cataract. In contrast, open angle glaucoma (a “common” eye disease) affects a mere 11% of the elderly.

It is possible now to arrest the progress of 95% of cases of myopia in childhood by the use of prism controlled bifocals. The remaining 5%, of cases can be arrested by the use of apex clear Ruben Offset contact lenses, which leave the corneal centre underpressed. What aetiology allows such treatment to be effective?

Four assessments from work starting in 1960 suggest that 90% of cases of myopia could be environmentally caused and 10% could be hereditary.

Workers in Japan first showed that heredity was responsible for more than half of cases, and it was shown in 1970 by radiometric measurements that the vitreous pressure in monkeys was affected by environment. Studies in children and adults showed that myopia has a constant significant rise in pressure compared with their normal or hypermetropic cohorts. Two 10 year retrospective analyses of pressure recordings showed that patients with myopia had significantly increased intraocular pressure (at least 3.0 mm Hg). This is probably because the higher intraocular pressure distorts the cornea, and the soft globe of a child’s eye by simple expansive stress and by considerably greater tangential scleral stress, both leading to myopia.

Reduction of this pressure can be effective in three ways: bifocals or half frames “paralyse” accommodation, and continuous close work then does not interfere with zonular fibre function and ocular drainage; prisms reduce accommodative tensions in the medial recti and thereby reduce globe distortion and pressure; and hard contact lenses “reshape” any tendency to gonio-obstructive myopia. Myopia causes simple glaucoma of a different type from adult glaucoma and malignant myopia in the apparently normotensive eye.

Environmental and, by implication, accommodative studies in isolated Japanese islands showed 92% of emmetropes and 4% myopia, whereas on the mainland they had 50% myopia. These figures imply a missed opportunity by ophthalmologists. In Bath, the community health scheme has tackled the problem and in a trial over five years reduced 60% of children with high myopia from 14-10 D to emmetropia using plano/bifocals with a +1.5 addition. We can do something about myopia, and perhaps more importantly is no longer the correct option.

Negative selection of patients for dialysis and transplantation in the United Kingdom

Sir,—Dr S Challah and others found that a 29 year old patient with renal failure and hepatitis would be allowed to die by 87% of British nephrologists (14 April, p 1119). This is consistent with another survey where 76% of renal units would reject a 37 year old patient who had hepatitis.

Patients with renal failure and hepatitis need a much more honest approach and open discussion. There are at least three renal units which will treat patients who have hepatitis B at dialysis or transplantation. From one of these units we present a graph of five year survival in 54 patients who were carrying the hepatitis B surface antigen and received grafts. The patients’ survival is well within the normal expectation of cadaver kidney recipients, and their hepatitis does not provide medical grounds for exclusion from treatment.

Nephrologists are rejecting patients because they fear cross infection, and yet in our unit only two members of staff have developed hepatitis from either dialysis or transplantation. From one of these units we present a graph of five year survival in 54 patients who were carrying the hepatitis B surface antigen and received grafts. The patients’ survival is well within the normal expectation of cadaver kidney recipients, and their hepatitis does not provide medical grounds for exclusion from treatment.

Staff and patients can now be given protection