

faced with choosing his career specialty. This form of character analysis is already being applied successfully to business concerns.

I ask, however, that the author amends his views regarding the character suitability for anaesthetics. Having recently started a career in anaesthetics I am finding how my rapport and relationship with a patient is closer and perhaps more important than when I worked as a physician. After all, the anaesthetist is often the main link with a patient before, during, and after the stresses of surgery. In addition, regional anaesthesia and clinics for pain control are becoming more popular. Here the anaesthetist is dealing with a conscious patient, and he must therefore have the confidence and desire to communicate with people. I suggest that if a medical graduate finds himself uncomfortable with patients he should not consider anaesthesia as a career.

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SIR,—May I express an opinion different from that of Professor Philip Rhodes (13 November, p 1404)? He states that: "The skills needed to be a surgeon are a thing apart from all others, and they may be learnt by experience, by thinking about them, and by application." I believe that reasonable manual dexterity is an inborn neurological capacity and that it is quickly evident whether or not a young doctor has the aptitude for surgical handicraft. This is, of course, quite different from the long task of learning what operations he wants to do, the way of going about them, and their indications. The situation in respect of this inborn capacity is analogous to that of the confident and effective body control characteristic of the good rock climber. It is evident at a very early stage whether a novice climber will be of high or low standard.

I think the aptitude for skilled manipulation is in fact a natural gift of varying level. It should be regarded as a special factor of intelligence (as, for example, ability in the visual arts). People who do surgery without this special aptitude may succeed from the point of view of academic surgery but they are nevertheless tedious and fumbling. Young doctors should not be encouraged to pursue a career in surgery if they do not find at an early stage the aptitude for handicraft skills required.

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Evaluating preregistration posts

SIR,—Professor Philip Rhodes's thoughts (16 October, p 1103) about the order in which house jobs should be done cannot be accepted without comment. He does not believe that the order in which they are taken matters.

I disagree with him. With the demise in some places of the anaesthetist's preoperative visit it is left to the preregistration house surgeon to make an assessment of a patient's fitness for surgery. Those housemen who have completed a medical house job before starting their surgical job are in a much better position to make this assessment and to deal with the attendant medical problems of an increasingly older

hospital population whether surgical or medical.

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Finishing up the preregistration year

SIR,—The advice concerning the procedure for applying to the General Medical Council for full registration (30 October, p 1264) was in one respect incomplete. A certificate of satisfactory service should be issued by the employing authorities for each of the appointments held by the preregistration house officer. When these certificates are forwarded to the dean of the medical school (or the postgraduate dean or other official appointed by the university for this purpose) they should be accompanied by a completed copy of the council's form of application for full registration (form FR1). The form incorporates a certificate of experience which must be signed on behalf of the university. The application form, including the certificate of experience, and the fee for registration should then be forwarded to the council.

Universities are permitted by the council to issue certificates of experience not more than 14 days before the date on which the preregistration experience required for full registration will be completed. So long as the council has the completed application form, the certificate of experience (duly signed), and the correct fee by that date full registration is granted with effect from the following day.

Copies of the application form for full registration may normally be obtained from medical schools or from the General Medical Council.

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Dexamethasone deleterious in cerebral malaria

SIR,—Dr P Rees (6 November, p 1357) criticises the design and conclusions of the double blind trial¹ in which dexamethasone not only prolonged coma in cerebral malaria but also increased the incidence of complications and failed to improve mortality.

He has misconstrued the data from the 17 fatal cases. Although the interval between treatment with dexamethasone and death was longer than that between placebo and death, the patients in the two groups survived for similar periods after becoming unconscious. Fatal cases in the dexamethasone group had been treated with both quinine and test drug at an earlier stage of coma than those in the placebo group so it is not surprising that they survived for longer after these events. Although the two groups of 50 patients were comparable before treatment the fatal cases were not, and so Dr Rees's conclusion that steroids prolonged life for 20 to 30 hours is not valid. He explains neither why nor how he believes that corticosteroids could be beneficial in cerebral malaria.

Four of the patients receiving dexamethasone who died did so before receiving their last dose of dexamethasone, and three of the other four died within 15 hours of their last dose, which is within the period of persisting tissue activity.² We consider therefore that the length of corticosteroid treatment was long enough to draw conclusions about mortality.

Dr Rees exaggerates the initial dose of dexamethasone used in the study by calculating the dose for a 128 kg patient. Only 0.5 mg/kg body weight of dexamethasone was given (equivalent to 3.125 mg/kg body weight prednisone) followed by

10 mg every six hours. We cannot agree that the complications associated with this dose of dexamethasone were not "especially worrying." Major gastrointestinal haemorrhage and bronchopneumonia are life threatening problems in the best hospitals, but are particularly dangerous in unconscious patients nursed in the rural tropical hospitals that admit most cases of cerebral malaria. The incidence of frank pulmonary oedema in the two treatment groups was not significantly different ($p=0.3$), and in view of the small numbers (three versus seven) no conclusions can be drawn.

Dr Rees is surprised that the median parasite counts of the two groups before treatment were relatively low (12 440 and 15 486/ μ l), and he feels that coma would be unusual with these counts. Although there is a general relation between the degree of parasitaemia and prognosis in falciparum malaria³ it is well known that in cerebral malaria scanty peripheral parasitaemia may be associated with sequestration of parasitised cells in deep vascular beds.^{4,5} The peripheral parasite count thus seriously underestimates the total burden of parasitised cells. Aminoquinolines were detected in the urine of 41% of our patients on admission, and 17 were already receiving intravenous quinine. This prior treatment probably contributed to the low counts.

Average parasite clearance times were 82 and 67 hours after the start of quinine treatment in the dexamethasone and placebo groups respectively. While we agree that quinine resistance in eastern Thailand may result in delayed parasite clearance we would be interested in the evidence on which Dr Rees bases his comment that clearance times are shorter in patients with cerebral malaria in other parts of the world.

Dr Rees seems to be confusing stratification with randomisation. For the paired sequential trial patients were classified before randomisation into severe and less severe strata on the basis of clinical and laboratory findings which included parasite counts. This separation was fully supported by the results: all 17 deaths occurred in the severe stratum. Randomisation is by definition independent of all variables. Although the median parasite count was lower in the dexamethasone group (which should, according to Dr Rees, have favoured survival) this difference was not statistically significant, thus confirming that randomisation was adequate in this double blind placebo controlled trial.

The patient rejected from the study because of cryptococcal meningitis had a parasite count above 1 000 000/ μ l. This could scarcely be regarded as a scanty or incidental parasitaemia. We believe that lumbar puncture is mandatory for the diagnosis of coma in a febrile patient without localising neurological signs whether or not there is falciparum parasitaemia.

If Dr Rees and others persist in recommending corticosteroids for severe falciparum malaria the onus is on them to produce evidence of benefit to outweigh the deleterious effects shown in the Chantaburi study.

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¹ Warrell DA, Looareesuwan S, Warrell MJ, *et al.* *N Engl J Med* 1982;306:313-9.

² Dluhy RG, Newmark SR, Lauler DP, Thorn GW. In: Azarnoff DL, ed. *Steroid therapy*. Philadelphia: W B Saunders, 1975:1-14.

³ Field JW, Niven JC. *Trans R Soc Trop Med Hyg* 1937;30:569-74.

⁴ Marsden PD, Bruce-Chwatt LJ. In: Hornabrook RW, ed. *Topics in tropical neurology*. Philadelphia: F A Davis, 1975:29-44.

⁵ Schmidt JA, Udeinya JJ, Leech JH, *et al.* *J Clin Invest* 1982;70:379-86.

Chemoprophylaxis of malaria in Africa

SIR,—I entirely agree with Dr D G McLarty (23 October, p 1202) that travellers to malarious