American Society of Anaesthesiologists' (ASA) grade system (ASA I, healthy patient; ASA II, mild systemic disease; ASA III, severe, non-incapacitating systemic disease; ASA IV, severe, incapacitating systemic disease which is a constant threat to life; and ASA V, moribund patient, not expected to live for 24 hours with or without surgery) abnormal values were found in 15% of patients in grade I, 17% in grade II, 35% in grade III, and 48% in grades IV and V. In addition, most abnormal values in patients in grade II were minor and not clinically important. Therefore patients in grades I and II do not need routine estimations of urea and electrolyte concentrations whereas in those in grades III, IV, and V do, as the results are much more likely to be abnormal.

I therefore suggest that this grading system, which could be easily learnt by junior medical staff, would be more appropriate than age as an indicator of the need for biochemical screening preoperatively.

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We agree with Drs Ian T Campbell and Peter Gosling (1 October, p 803) that routine preoperative biochemical screening is unnecessary and not cost effective in patients under 50. Blood tests by either venepuncture or finger pricking can be an unpleasant part of any hospital stay, but this is especially so in children, and we have specifically examined the value of routine preoperative blood tests in paediatric orthopaedic practice at the Royal Liverpool Children’s Hospital, Alder Hey.1 One of our conclusions was that preoperative estimation of serum urea and electrolyte concentrations and full blood counts are unnecessary in healthy children. Out of 346 patients admitted for elective operation, 28 (8·1%) underwent estimations of serum urea and electrolyte concentrations. Two had abnormal results, both patients who had developed renal failure. We also agree that the inexperience of junior staff is often an important factor in unnecessary, excessive blood testing. As it is unlikely that our specialty is alone in this respect we strongly urge others operating on children to review their policies.

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Drug Tariff increases

I sympathise with Dr J D Beale (15 October, p 981), who throws away his new copy of the Drug Tariff every month, and I agree that this is a shameful waste to nation’s money. Dispensers perhaps think of themselves, however, as the frequent user of the Drug Tariff, and we welcome its new format and monthly publication. Dr Beale may find only two or copies a year adequate for his needs, but I would prefer to receive monthly copies as a service. I support, as a compromise, that a single copy of the Drug Tariff should be sent monthly to every practice rather than to every general practitioner. Large non-dispensing practices would receive sufficient copies for a doctor to have one or two, whereas small dispensing practices would continue to receive the up-to-date information that they require.

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Children and apartheid

Dr R J Kobrín’s reply (24 September, p 795) to Dr Naomi Richman’s article (13 August, p 495) confuses the views of an American doctor with that of a white South African man.

As a doctor he has chosen to work in that country and apparently treats patients of all races. He has, however, chosen also to live in South Africa, and therefore, in my view, was not the best choice to write an article with the fruits of the apartheid based political and social system.

Many white South African doctors did not choose that path. Nor did they wish to be jailed, or worse, for opposing the system. They can now be found in their thousands in the United Kingdom, the United States, Canada, Israel, Australia, and New Zealand.

Dr Kobrín might not agree with their view that imperialism as a human being take precedence over calling as a doctor. It is this perspective, however, that underlies support for Dr Richman’s argument.

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Depression resistant to tricyclic antidepressants

Dr FREDERICK W ENGSTROM (Mental Health Department, Park Nicollet Medical Center, Minneapolis, Minnesota 55416, United States) writes: Dr P J Owen (13 August, p 435) pointed out that up to one third of patients with major depression either fail to respond or respond partially to treatment with tricyclic antidepressants. In his article he has not considered for many patients. This argument equates clinical non-response with failure of drugs and ignores the issue of non-compliance, perhaps because non-compliance is hard to measure. Recently, the measurement of compliance has been enhanced significantly.

Nineteen patients who were prescribed antidepressant drugs were given pill bottles equipped with micro-electronic monitors in their caps; the microprocessors embedded in the caps were made by Aplex Corporation. The data obtained showed that 13% of patients were in taking their drugs, and, not surprisingly, four of them did not improve at all. One patient had to be admitted to hospital, and the three other patients’ non-compliance with treatment was improved when it was discussed openly. Before this none of the five patients had admitted to non-compliance. Accurate measurement of compliance and drug levels may decide whether adding lithium or changing the drugs in other ways will help treat depression or whether the patient merely needs to take the original drug as prescribed.

Needing doubts about where to vaccinate

Mr J PIGGOT (Belfast BT9 6EZ) writes: With reference to the article by Dr Keith Thompson (24 September, p 779) I would like to draw attention to the 10 babies who have been referred to me with sciatic nerve palsy after injections in the upper outer quadrant of the buttck. One baby received an injection for hypocalcaemic cramps, the second received diazepam intramuscularly for atactic crisis, and the third received penicillin for pneumonia. The injection was given “on the mark.” The baby who received calcium made a full recovery from a complete sciatic nerve palsy but had cerebral palsy. The other two recovered function in the posterior popliteal nerve but not in the lateral popliteal nerve.

Diagrams illustrating division of the buttck into quadrants have been accompanied by a syringe and needle directed towards the centre point of the buttck. If an infant is injected firmly in this direction, no matter how short the needle, the sciatic nerve may be penetrated. The upper outer quadrant of the buttck is safe only if the needle is pointed upwards and outwards away from the nerve. Though needle trauma and rubella vaccine may not be neurotoxic, inserting a needle into a major nerve cannot be considered to be good practice. Injections in the upper outer aspect of the buttck should not be given in the lower third as acute chemical synovitis has resulted from the needle entering the subcutaneous panniculus. Repeated injections of antibiotics in infants do damage and contracture the quadriceps muscle, resulting in loss of knee flexion or habitual dislocation of the patella. Such a course of antibiotics is best given intravenously. All injections cause trauma to the injected tissues. I have seen osteomyelitis of the os calcis after a stab wound of the heel, made to collect blood for estimation of haemoglobin. A considerable disturbance of growth of the os calcis ensued. No site is taboo as long as the risks and complications are understood and the correct technique is used.