1985 House of Lords ruling in Gillick *v* DHSS, which still holds good today, may serve to remind doctors of the duty they owe to parents and to their profession.

Lord Justice Fraser: "Nobody doubts that in the overwhelming majority of cases the best judges of a child's welfare are his or her parents. Nor do I doubt that any important medical treatment of a child under 16 would normally only be carried out with the parent's approval. That is why it would and should be 'most unusual' for a doctor to advise a child without the knowledge and consent of the parents on contraceptive matters."

Lord Justice Scarman: "I accept that great responsibilities will lie on the medical profession. It is however a learned and highly trained profession, regulated by statute and governed by a strict ethical code which is vigorously enforced. Abuse of the power to prescribe contraceptive treatment for girls under the age of 16 would render a doctor liable to severe professional penalty."

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Migraine and risk of ischaemic stroke

EDITOR,—According to Claire Morton,[1] Christophe Tzourio and colleagues found no overall association between migraine and ischaemic stroke.[2]

In our case-control study of cerebral ischaemia we recruited 308 young adults (135 with transient ischaemic attack and 173 with stroke) and 591 controls and showed a significant association between cerebral ischaemia and migraine with aura in the medical history (odds ratio 5·2; P=0·016) in patients under 45.[3] The odds ratio increased to 14·8 after adjustment for other vascular risk factors, carotid lesions, and cardiac diseases. Odds ratios were higher in the subgroup of patients with stroke at entry (8·6; P=0·05) than in the patients with transient ischaemic attack (3·0; P=0·21). Consequently, the negative overall result in the study of Tzourio and colleagues does not seem to be attributable, as Morton claims, to the exclusion of those patients with stroke (mostly transient ischaemic attack in our opinion) well enough to remain at home.

In our study the risk of stroke associated with migraine was evident both in patients aged under 35 and in those aged 35-44, with a higher odds ratio in patients under 35 (10·6; P=0·03) despite a similar prevalence of migraine with aura in patients over and under 35 (2·4% *v* 2·7%). This dependence of the risk on age may be another explanation for the significant association between migraine and ischaemic stroke in women under 45 reported by Tzourio and colleagues.

Morton's second observation, concerning the vascular territory affected in migraine sufferers, also seems questionable. Broderick and Swanson refer to cases of migrainous stroke, a clinical entity different from ischaemic stroke occurring in patients with a history of migraine.[4]

In our study the carotid territory was affected in three quarters of patients with coexisting stroke and migraine with aura in their medical history. Two patients had an occlusion of the distal branches of the middle cerebral artery, and one had fibromuscular dysplasia of the common carotid artery. One patient had a cerebral infarction in the left occipital lobe with occlusion of the corresponding posterior cerebral artery. These findings are consistent with most of the proposed mechanisms for stroke related to migraine.[5]

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Monovalent pertussis vaccine no longer available

EDITOR,—The *BMJ* recently published two articles on pertussis vaccination. The first, on the national childhood encephalopathy study, reports that diphtheria, tetanus, and pertussis vaccine may, rarely, be associated with the development of severe acute neurological illnesses.[1] The authors concluded (in agreement with the Department of Health's guidelines[2]), however, that "the balance of possible risk against known benefits from pertussis immunisation supports continued use of the vaccine."

The second article was David Miller's review of a television documentary programme about batches of pertussis vaccine in the 1960s and 1970s that were a possible cause of brain damage in some cases.[3] Again, though, the message was that pertussis vaccination was to be recommended for most children.

Neither article mentioned, however, that the manufacturers no longer produce monovalent pertussis vaccine. Owing to lack of demand pertussis vaccine is now available only with diphtheria and tetanus vaccine. If parents do not want their child to receive pertussis vaccine, or are advised against it, a course of diphtheria and tetanus vaccine is given (three doses, at 2, 3, and 4 months). If the situation then changes (for example, parents change their minds) and a further three doses of diphtheria and tetanus vaccine are given with the pertussis vaccination there is a risk of severe local reactions to the tetanus vaccine.

This means that, before any injections are given, parents considering not having their child vaccinated against pertussis must be counselled. All general practitioners, health visitors, practice nurses, and community and hospital paediatricians should be aware of this change. Parents should be told both of this change and of the statistics on the risks and benefits of the vaccination.

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Mortality and morbidity after hip fractures

EDITOR,—Graham Keene and colleagues once again highlight the considerable morbidity and mortality attached to proximal femoral fracture, particularly in those patients with extracapsular fractures.[1] The two year difference in mean age between patients with extracapsular fracture (80 years) and intracapsular fracture (78 years) is clinically important and presumably statistically significant, although this is not reported. A significant four year difference in the age of elderly women (aged 65 and over) with extracapsular or intracapsular fractures in Belfast has been reported, but there were no significant differences in mortality between cervical and trochanteric fractures within age groups.[2] In Newcastle, when age was taken into account there was no difference in the fatality of trochanteric and cervical fractures.[3]

The high mortality of hip fracture is starkly highlighted by rates of 28% at six months and 33% at one year. Similarly high values have been reported in elderly women in Belfast (mean age 81 years) who had a six month mortality of 29% and a one year mortality of 35%.[4]

It is important that the influence of age, sex, and domicile, in addition to other variables, is considered before comparisons between mortality and morbidity figures are made. A report from Belfast of a six month mortality of 15% suggests that not all elderly subjects with fractures were enrolled.[5] Similarly low mortality may occur if studies include only elderly people residing in the community at the time of fracture, excluding the frail elderly in institutional, residential, and nursing home care. It is clear that if a purchasing authority seeks to compare measures of outcome and length of stay, or if comparitive audit is undertaken, the nature of the population and its selection must be clearly identified.

The continuing increase in the elderly proportion of the population will result in increasing numbers of hip fractures and attendant higher age related mortality and morbidity. Hospital care, outcome, and preventive measures need to be addressed from both a humanitarian and a financial perspective.

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Managing stroke

EDITOR,—Peter Sandercock promoted the establishment of stroke units and discussed the potential cost, suggesting that before hospitals initiated a specific stroke unit they should examine the costs and resources currently used.[1] During a seven month period we identified all patients admitted to our hospital with a diagnosis of stroke. Seventy nine patients (39 men, 40 women; mean (SD) age 73·8 (8·8) years) were still in hospital two weeks after admission. They were assumed to be in need of further rehabilitation and included in a study.

We looked at the resources used by these patients in terms of bed days and average amount of treatment given to each patient. The mean (SD)