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Children's consent to treatment

EDITOR,—In their editorial on the capacity of children and young people to consent to medical treatment J P H Shield and J D Baum make no reference to young people suffering from mental disorders.¹ Children and young people may present, though not commonly, with severe mental disorders such as schizophrenia, major depression, and anorexia nervosa. Each of these disorders can be severe enough to put the patients' lives or the lives of others at risk. When a young person with such a disorder is adjudged normally to have the capacity to give or withhold consent and is actively refusing admission to hospital or treatment, use of mental health legislation should be considered.² In England and Wales there is no lower age limit to any of its provisions for compulsory hospital treatment.³

Recent examples of such cases include a 15 year old girl who refused treatment for severe anorexia nervosa and was detained to permit nasogastric feeding and a precociously mature and intelligent 13 year old boy with a possible manic disorder who refused continued admission and was consequently detained for further assessment.

Traditionally, child psychiatrists have had little call to resort to such measures and in these rare cases have tended to rely on parental consent alone. In the light of the Children Act 1989 this practice is now almost certainly untenable.⁴ Both consultant child psychiatrists and senior registrars in training therefore need to be familiar with mental health legislation and, in England and Wales, should ensure that they are recognised as such by seeking the approval of the secretary of state under section 12(2) of the Mental Health Act 1983.⁵ Paediatricians and other doctors working with children and young people should also be aware of the need to seek psychiatric advice in such cases.

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HIV infection in inner city A&E department

EDITOR,—M C Poznansky and colleagues' study of the prevalence of HIV infection among patients attending accident and emergency department highlights the use of accident and emergency services by HIV positive people.¹ This has implications for the training of staff as well as the planning of services.

The authors' data raise important questions that require further explanation and debate. In particular, the authors found that three quarters of the patients who were HIV positive were "foreign

visitors." Their table suggests that at least five of these people (and possibly as many as eight) were registered with a general practitioner. This finding that up to 85% of the foreign visitors who were HIV positive but only 28% of those who were HIV negative were registered with a general practitioner is surprising. In our experience, foreign visitors attending an accident and emergency department are unlikely to be registered with a general practitioner, and why HIV positive visitors should have such a high rate of registration is unclear. The authors do not state whether the general practitioners were in London or, indeed, were based in Britain, and these data are important. Foreign visitors' duration of stay in Britain may relate to their likelihood of being registered with a general practitioner, and again it is important to know whether the authors collected these data.

Of the 12 patients who were HIV positive, eight disclosed this information at presentation. In our unit HIV positive patients who present out of hours with urgent problems do so via the accident and emergency department (M B Lynch *et al*, meeting of Medical Society for the Study of Venereal Diseases, Zurich, 1993). It is unclear if the HIV positive patients in the study were attending for conditions related to HIV infection on their way to specialist care in the hospital.

The importance of studying the prevalence of HIV infection in acute settings is to inform medical practice and planning. Uncritical reporting of the prevalence should not, however, lead to action without more detailed analysis.

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- Poznansky MC, Talkington J, Turner G, Banks MJK, Parry JV, Connell JA, *et al*. Prevalence of HIV infection in patients attending an inner city accident and emergency department. *BMA* 1994;308:636-7. (5 March.)

Authors' reply

EDITOR,—The category of "foreign visitor" used in our paper covered patients who were not British citizens but had been resident in Britain for up to five years; it included tourists, foreign workers, refugees, and foreign students. In our experience a large proportion of people from these subgroups register with a general practitioner during their stay in Britain. In the study nine (75%) of the 12 HIV positive patients were foreign visitors; seven (58%) of the 12 knew their London based general practitioner. In comparison, 254 (28%) of the 906 HIV negative people were foreign visitors, and 453 (50%) of the 906 were registered with a general practitioner. Further study is required to define why there was an appreciably higher proportion of foreign visitors in the HIV positive group of patients than in the HIV negative group.

The triage groups for HIV positive patients in this study did not differ greatly from those for HIV negative patients. Of the 12 HIV positive patients, five were in major A and B categories and seven in minor A and B. The department of genitourinary medicine at St Mary's Hospital admits patients with conditions related to HIV infection via the accident and emergency department to the specialist unit on a 24 hour basis, but these "expected" HIV positive patients were not included in this study. Referral of patients to specialist care and specific diagnoses related to HIV infection were not noted in this study. Information gained from patients was necessarily brief to ensure full compliance by the patient and to aid complete data entry by the admitting accident and emergency senior house officer.

We reiterate that the prime importance of the

finding of a prevalence of HIV-1 of 1 in 42 in patients aged between 16 and 45 attending an accident and emergency department in inner London is that it reinforces the use of procedures and equipment that reduce the exposure of health care workers to materials infected with HIV. Furthermore, we believe that, on the basis of our study and many studies performed in accident and emergency departments in inner cities in the United States, it is unlikely that St Mary's Hospital is alone in London in serving a population with a high prevalence of HIV-1 infection. We await results from other anonymous prevalence studies in accident and emergency departments in Britain with interest.

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Recovery from anaesthesia

EDITOR,—As John N Lunn states,¹ recovery room facilities in most hospitals meet the recently published requirements of the Association of Anaesthetists of Great Britain and Ireland.² In most hospitals, however, patients leave the recovery area to receive a variable standard of care in a surgical ward, which often contrasts sharply with that provided in the operating theatre and recovery room. This imbalance conflicts with recent evidence suggesting that adverse events occurring in the first three days postoperatively are as important as those occurring intraoperatively.^{3,4}

Three years ago the Association of Anaesthetists published a document proposing the development of specific high dependency units to provide a level of care intermediate between that provided in intensive care units and that provided in general wards.⁵ Such units would allow high risk patients to be grouped together; all such patients require skilled nursing, careful monitoring of physiological variables, meticulous fluid management, oxygen treatment, and optimal facilities for resuscitation. In addition, such facilities would allow the use of techniques such as thoracic epidural analgesia, which are not always possible in general surgical wards. For patients in the first three days after surgery one further advantage of a single location would be that immediate medical care could be provided by an anaesthetist, who is more familiar with these aspects of management than the surgical house officer usually delegated to look after such patients and who does not have the added responsibility of attending clinics or admitting new patients. Furthermore, an ideal environment is created in which to carry out the research so badly needed.

This description of how optimal care in the early postoperative period could be provided contrasts with reality. The postoperative high dependency units that have been developed are usually recovery areas modified by 24 hour nursing care, with the patient returning to the general ward on the first postoperative morning. Alternatively, the more traditional situation prevails whereby each ward has its own high dependency area. Neither of these situations can be considered ideal, but they may be more financially realistic than the option described above. On the other hand, a specifically designed, properly funded postoperative high

dependency unit might permit improved care and provide an acceptably economic option owing to reduced complications, earlier discharges, and reduced use of intensive care facilities.

A study of substantial proportions is needed to examine this question, which could have major implications for the organisation of postoperative care. The continuing study of the trauma unit at Staffordshire Royal Infirmary has set a precedent for such research. Similar foresight applied to the question of provision of postoperative care might permit a major and widespread advance in a relatively neglected part of the perioperative period.

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Arthritis as a complication of intravesical BCG vaccine

EDITOR,—In their editorial on treating superficial bladder cancer with intravesical BCG vaccine¹ Neeraj Sharma and Stephen Prescott do not mention the important, though rare, complication of arthritis.^{2,4} We describe a case of asymmetric oligoarthritis in a patient treated with intravesical BCG vaccine.

After an episode of painless haematuria in April 1992 a 40 year old man was diagnosed as having a moderately differentiated transitional cell carcinoma of the bladder. At cystoscopy all visible tumour was resected. Repeat cystoscopy, however, showed recurrence, with the development of extensive satellite lesions. A six week course of weekly treatment with intravesical BCG vaccine was started in November. The first three instillations were each followed by influenza-like symptoms, which responded to antipyretic agents. After the fourth treatment he developed fever (38°C), bilateral conjunctivitis, periorbital oedema, and arthralgia of the left shoulder. Over the next two days his right fourth toe, right knee, both ankles, and right fourth proximal interphalangeal joint became painful, tender, and swollen.

Laboratory investigations showed a normal full blood count, but the C reactive protein concentration and erythrocyte sedimentation rate were 180 mg/l and 84 mm in the first hour respectively. Blood and urine cultures yielded negative results. A chest x ray film was normal. Isoniazid and prednisolone 30 mg were started. No clinical improvement was observed.

Further serological investigations excluded infective causes of reactive arthritis. A test for rheumatoid factor yielded a negative result and serum uric acid concentration was normal, but he was positive for HLA B-27. The isoniazid was stopped and prednisolone withdrawn, and diclofenac was started. He improved progressively and with regular physiotherapy returned to full mobility within a month.

The incidence of arthralgia after intravesical instillation of BCG vaccine is quoted to be 0.5-1% of treated patients.^{3,4} Bilaterally symmetric polyarthritis affecting the hands, wrists, and knees generally develops a few days to five months after the first instillation.² Further instillations aggravate the arthritis. Laboratory investigations yield non-specific findings, and examination of synovial

fluid or a synovial biopsy specimen does not show infection with the Calmette-Guérin bacillus. Because of the absence of diagnostic tests, attention to the sequence of events in history taking is of paramount importance.

The pathophysiology of this condition is believed to be a reactive immunogenic response to the BCG antigen, the same response that is essential for BCG vaccine's therapeutic effect on the bladder cancer. As immunotherapy with BCG vaccine becomes more commonly used more cases of this new form of reactive arthritis are likely to occur.

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Gangliosides and the Guillain-Barré syndrome

EDITOR,—Various authors criticised our report on Guillain-Barré syndrome after gangliosides.¹ Francesco Grigoletto computed the cases of the syndrome expected by chance alone according to age specific frequencies of therapeutic cycles of gangliosides.² Without defining "therapeutic cycle" he concluded that our 24 cases were equal to the number expected by chance in Italy. However, to obtain this result he considered one month after gangliosides were given as the period at risk, whereas we considered only the first three weeks and excluded cases with later onset. Applied to our three week interval, Grigoletto's calculations yield 17 cases expected by chance, appreciably less than our 25.

J C Sampson and M G Fiori misleadingly state that our 5.6 cases per year "represent a yearly incidence of 0.2/100 000"—but this is a three week incidence, the yearly incidence being 3.5/100 000. They further argue against comparing the incidence of Guillain-Barré syndrome in the normal population with that in patients treated with gangliosides, "that is, patients with neuropathy." However, only two of our cases had received gangliosides—for eight and for 10 days—for "neuropathy," unilateral Bell's palsy, a highly improbable presentation of the syndrome with this time course. These authors speculate that low back and (unilateral) sciatic pain represented initial manifestations of unrecognised Guillain-Barré syndrome, leading to protopathic bias. Ropper and Shahani noted that pain was "invariably bilateral" in Guillain-Barré syndrome³; when it was the presenting symptom, weakness followed within five days, a shorter interval than in our patients. That "several reports have described measurable effects of ganglioside treatment in controlled clinical trials" does not disprove our statement that "no well designed clinical trial has convincingly shown their efficacy."

Marino Massarotti and Rita Matano suggest protopathic bias for patients who "already had clinical manifestations of a paretic condition" and those with pathological signs identifiable "as pathogenic features."⁴ However, paretic conditions were unrelated to our patients' subse-

quent symptoms, and we discussed the low prevalence of prodromal infections in our group.¹ Admittedly, our opinion on the risk to benefit ratio for gangliosides is a personal one, and we are not surprised that Fidia's representatives disagree. Yet our opinion is shared by the German health authorities, who withdrew gangliosides in 1989. Gangliosides have not been marketed in Scandinavia, Britain, or the United States, where drug regulatory standards are more stringent, and the European Committee for Proprietary Medicine Products recommended their suspension. Finally, we would like to reassure Massarotti and Matano that our report on Guillain-Barré syndrome after gangliosides was not intended to disparage the research studies performed at Fidia's laboratories.

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Insurance against injury in clinical trials

EDITOR,—Recent correspondence has considered the issue of insurance against injury for participants in clinical trials.^{1,2} In the Netherlands many hospitals are not insured against injury that occurs during clinical trials not sponsored by a pharmaceutical company. If a complication occurred the patient's health insurance company might decide that, because the patient had voluntarily consented to a procedure that was not medically necessary, the company need not cover the financial consequences. This is undesirable, especially because legislation to make coverage of research mandatory is expected. To avoid discussions over whether a procedure during a study was done as part of research or for reasons of care I consider it to be mandatory that the research liability insurance policy and the professional liability insurance policy should originate from the same company. A research policy should provide cover for more than liability: it should also cover financial claims after a complication of a procedure that was performed correctly (risk coverage).

As the number of complications that occur during research is unknown, insurance companies are not eager to offer cover. In studies, procedures are often more stringently defined and patients are healthier than is the case in the real world. Perhaps pharmaceutical companies could help in calculating the average risk of a patient incurring injury