

attention of the NHS towards the macroscopically brain-injured patient and have resulted in little so far in the way of organized neuro-rehabilitation services even though the cognitive and behavioural disability associated with many 'mild head injuries' over the medium to long term have considerable personal, social and economic implications (treatment for minor head injuries alone in the USA costs \$1 billion per annum).² Few A&E departments in the UK have even begun to address the issue of prevention of secondary neuropsychiatric morbidity in the head injured³ yet, surprisingly, the most effective intervention in prevention is probably early counselling, focused on explanation of pathophysiology, typical sequelae and the likely time course of recovery to patients in the presence of family, friends or significant others.⁴ Clearly, the observation ward offers not just a safe and monitored area for a gentle recovery from head injury over 12 h or so, but it also offers a unique opportunity to make a fundamental and significant early contribution to the prevention of this enormous psychological morbidity.

We believe that the overall contribution of an observation ward to the smooth operation of an A&E department is greatly underappreciated in the United Kingdom, probably because of the reluctance of single-handed consultants to contemplate their organization. The recent surge in emergency admission, however, and the sheer scale of the current clinical burden (there were over 13 million new patient attendances in the A&E departments of England alone in 1993–94, personal communication) coupled with the haemorrhage of acute beds mean that the presence of an integral short-stay observation ward within all substantial A&E departments will soon imperative.

The management of head injuries is just one example of the advantages of an observation ward. At the RLUH, the ward has proved indispensable in the management of patients with seizures, self-poisoning, substance misuse, asthma, headaches, allergic phenomena and abdominal pain. Provided that there is frequent review by senior clinicians (i.e. at least twice daily), patients with head injuries and other self-limiting conditions can and, we believe, should be managed within the (if necessary, expanded) A&E department. Such an arrangement can ease the now dreadfully familiar overcrowding of many departments while protocol-driven care, multi-disciplinary follow-up and audit can prevent unnecessarily lengthy or pointless hospitalisation. Consultant numbers in A&E medicine are rising dramatically. We believe that the understandable

consequences of single-handed practice should be proportionately redundant. The time for inpatient emergency medicine is now upon us and optimal initial care of the head injured patient in an observation ward should be regarded as just an early paradigm.

REFERENCES

1. Brown S.R., Raine C., Robertson C.E. & Swann I.J. (1994) Management of minor head injuries in the accident and emergency department: the effect of an observation ward. *Journal of Accident and Emergency Medicine* **11**, 144–148.
2. Kraus J.F., Nourjah P. (1989) The epidemiology of mild head injury. In: *Mild Head Injury* eds H.S. Levin, H.M. Eisenberg & A.L. Benton, pp. 8–22. Oxford University Press, New York.
3. Hodgkinson D.W., Berry E. & Yates D.W. (1994) Mild head injury—a positive approach to management. *European Journal of Emergency Medicine* **1**, 9–12.
4. Wrightson P. (1989) Management of disability and rehabilitation services after mild head injury. In: *Mild Head Injury* eds H.S. Levin, H.M. Eisenberg & A.L. Benton, pp. 245–256. Oxford University Press, New York.

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What should doctors wear in the accident and emergency department? Patients' perception

I read with interest the paper by Boon and Wardrope.¹ I do not think that the authors conclusions that 'Patients and relatives who attended the A&E department did not mind what was worn (by doctors)' can be drawn from the data presented. On the contrary their data suggest a quite strong preference for the wearing of white coats.

In Table 1 of the paper, 2% of 73 respondents thought doctors in white coats looked unprofessional, 7% of 131 had this opinion of those wearing ordinary clothes and 4% of 119 had this opinion of those wearing theatre greens. So there were 5% more who thought that ordinary clothes looked unprofessional compared with the percentage that thought that white coats did. This gives a 95% confidence interval for the difference between population means of –0.4 to 10.4%. In addition 2% more thought that theatre greens looked unprofessional

compared with the percentage that thought that white coats did.

In Table 2, in the white coats week, 61% of respondents were happy with doctors wearing white coats, in the ordinary clothes week, 21% were happy with ordinary clothes, but 22% would have preferred white coats. In the theatre greens week, 20% were happy with theatre greens, but 18% would have preferred white coats. Looked at in another way, excluding those that do not mind, only 2% were unhappy with white coats during the theatre greens week, whereas 23% were unhappy with ordinary clothes and 19% were unhappy theatre greens. In this way there appears to be quite a striking preference expressed for white coats.

The authors justification for concluding that there were no preferences for any particular style is presumably because in each of the ordinary clothes and theatre greens weeks, there were roughly the same percentage of respondents who were happy with that style as would have preferred white coats. This was taken as evidence in favour of their conclusion, despite the weight of other evidence against it. The explanation for this particular finding is probably that many people will accept what is in front of them and be reluctant to criticize.

The findings from Table 1 that I mentioned above, and those from the visual analogue scale all showed trends towards a preference for white coats. To ignore these trends on the basis that they do not achieve statistical significance and to conclude therefore that the study shows that patients 'do not mind what is worn' is not a proper use of the statistical term 'significant'. It is likely that the preferences expressed were generally modified by some reluctance to criticize, in any case.

More generally I would make the criticism that no data were given on the proportions of patients and relatives who failed to complete the questionnaires each week, in order to consider 'non response bias'. No explanation was given either as to why there were twice as many questionnaires completed in the second week compared with the first.

I do not think that the conclusions made in this article can be drawn from the data given, and that the conclusion that patients preferred doctors to wear white coats is more likely to be valid.

REFERENCES

1. Boon D. & Wardrope J. (1994) What should doctors wear in the accident and emergency department?

Patients' perception. *Journal of Accident and Emergency Medicine* 11, 175–177.

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Trauma team concepts in the UK: tailoring resources to meet demand

In his audit of trauma teams in Trent,¹ Dr Highley raises a number of important issues which merit comment, especially as our Unit was presumably one of those audited.

Interestingly, he fails to define what constitutes an ideal team or who should lead it. Essentials of good trauma management include: appropriate triage by the emergency medical services (EMS), advanced warning to the receiving department, a team of dedicated medical and nursing staff involved in specific delegated tasks,² a common language of trauma management (ATLS), and clear logical documentation. Immediate accessibility of experienced personnel to provide definitive care, the regular audit of the workings of the trauma team (video review and debrief), and on-going audit of outcome (ideally by involvement in MTOS) are also essential.

We would agree with Dr Highley that a parallel approach to trauma management is necessary in the seriously injured patient as shown in Driscoll's work.² However experience in our unit (as assessed by video audit review) and in others is that the supposed *en masse* effect of surgical and orthopaedic clinicians (often junior because seniors are busy in theatre) tends to produce a less than favourable outcome. As mentioned, the proportion of juniors in the UK who are ATLS providers is at present low. We would disagree with Dr Highley that having a number of consultant anaesthetists trained in ATLS in a particular hospital is a good indicator of standards of trauma management amongst junior surgeons and anaesthetists.

At the Leicester Royal Infirmary, the trauma team consists of a team leader [Registrar/Senior Registrar in accident and emergency (A&E)], two A&E senior house officers (SHOs) and an intensive therapy unit (ITU) registrar, on a 24-h basis, all of whom have specific allocated tasks. All A&E SHOs are taught trauma management along ATLS principles (including moulages) during their 2-week induction course. Nursing staff in the A&E department have a similar team approach with clearly defined roles. Patients suffering potential serious injury are all managed