

# Head injury instructions: a time to unify

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## Abstract

**Objective**—To compare and contrast the head injury advice given by various hospitals in England after minor head injury, and to draw attention to the need for a national set of head injury instructions.

**Methods**—50 accident and emergency departments were contacted by post and asked to supply a copy of their head injury information card or leaflet; 41 hospitals replied (82%).

**Results**—Comparison of the cards showed inconsistencies and conflicting advice given by the departments contacted.

**Conclusions**—There is a need for a national head injury card and a proposal for such a card is presented.

(*J Accid Emerg Med* 1997;14:238-239)

**Keywords:** head injury instructions; accident and emergency departments

It has been estimated that one million new cases of head injury attend hospital in the United Kingdom each year.<sup>1</sup> Approximately four to five times as many patients attend as are admitted.<sup>2</sup> The signs and symptoms associated with head injury depend on the extent of the tissue damage.<sup>3</sup> They may appear immediately following the trauma or several hours later. It is therefore important that the relatives or friends of discharged patients should receive both verbal and written advice to alert them to any changes suggesting that the patient's injuries are more serious and that the patient should return to the hospital urgently. The purpose of this study was to examine the written advice given out by accident and emergency (A&E) departments, to formulate a set of clear head injury instructions.

## Methods

Fifty A&E departments in England were contacted by post and asked to supply a copy of their head injury card or leaflet. These were compared and the information collated to identify similarities and differences between advice given. No comparison was made between the head injury advice leaflets from hospitals with or without neurosurgical departments, or between teaching hospitals and district general hospitals. Our aim was not to highlight the differences between hospitals but to identify similarities that could be used to develop a set of instructions that would be widely acceptable.

## Results

Of the 50 hospitals contacted forty one replied (82%). Eight hospitals had neurosurgical

*Table 1 Symptoms detailed on hospital head injury advice cards, with the percentage of responding hospitals listing the symptom*

Headache	90%
Drowsiness	66%
Disturbance of vision	46%
Vomiting (persistent)	36%
Vomiting or nausea	34%
Fits	32%
Increased sleepiness	17%
Unconsciousness	15%
Any other unusual symptoms	12%
Dizziness	10%
Difficulties in awakening	7%
Weakness in any of the limbs	7%
Giddiness or balance problems	7%
Inequality of the pupils	5%
Staggering	2%
Photophobia	2%

*Table 2 Advice given in hospital handouts, with the percentage of responding hospitals listing the advice*

Avoid alcohol	19%
Avoid tranquilisers	15%
Do not watch television	15%
Rest/observe for 24 hours	12%
Take only prescribed medicine	12%
Do not go home alone	7%
Do not read	7%
Do not play sports	7%
Eat only light meals	5%

facilities. Eleven hospitals sent separate cards for adults and children, and 10 stated that they were in the process of updating their cards and included other symptoms or advice that they would like to add. All cards were written in English only. Presented below are the results which for clarity have been separated into adults and children, symptoms and advice.

## ADULTS' SYMPTOMS

Table 1 shows the symptoms that the hospitals participating in the survey detailed on their handouts, along with the percentage of respondents listing that symptom. However, only 41% of the respondents wrote on their card that the patient should return to the hospital if any of the symptoms occurred.

## ADULTS' ADVICE

Table 2 shows the advice listed on the handouts, and the percentage of hospitals giving that advice. Not all hospitals gave advice in their handouts, but merely listed symptoms to look out for.

## CHILDREN'S SYMPTOMS AND ADVICE

The results from the 11 respondents who sent a separate card relating to children are shown in table 3, which gives all the symptoms mentioned and the percentage of the respondents listing each symptom. Table 4 shows the advice provided on the cards and the percentage of respondents giving that advice.

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Accepted for publication  
1 April 1997

Table 3 Symptoms detailed on hospital head injury advice cards for children, with the percentage of responding hospitals listing the symptom

Headache	100%
Persistent vomiting	100%
Difficulty in awakening	100%
Drowsy	64%
Blurred vision	64%
Fits	55%
Loss of appetite	36%
Increased crying	36%
Sleepiness	27%
Inequality of pupils	27%
Confusion	27%
Off colour	18%
Irritable	18%
Change in body temperature	9%
Photophobia	9%
Staggering	9%
Worried parent	9%

Table 4 Advice relating to children, and percentage of respondents including the advice on their cards

Check child by waking every hour but it is not necessary to keep the child awake	36%
Rest for 24 hours	27%
Do not watch television	27%
Take paracetamol	18%
Do not read	9%
Give only fluids for 24 hours	9%
Wake child every 2 hours	9%

## Discussion

The management of more severe head injuries is well documented with the criteria for skull x rays, admission for 24 hour observation, and referral to a neurosurgical centre quite clear.<sup>4</sup> However, it is less clear what information should be given when a patient is not admitted. This study points out some of the conflicting advice given, for example "Check child every hour by waking"/"Wake child every two hours". It also shows some of the inconsistencies, for example "Do not read", given out in only 7% of cases. Conflicting advice given by hospitals and general practitioners may lead to confusion. Some advice does not appear to be backed up by published reports, for example "Do not watch television", although we suspect that this advice is given because of a concern regarding prolonged headache. Terms such as "drowsy" or "semiconscious" are open to differing interpretation.

The usefulness of head injury instruction cards has been studied elsewhere and their value questioned. The value of such cards has been enhanced by their being clearly understandable, relevant, consistent, and produced

Table 5 A suggestion for a national head injury card

### Adults

Ensure a responsible person is available to keep an eye on you for the next 24 hours and show them this card  
Rest for the next 24 hours  
DO take painkillers such as paracetamol to relieve pain and headache  
DO NOT drink alcohol for the next 24 hours  
DO take your normal medication but DO NOT take sleeping tablets or tranquilisers without consulting your doctor first  
If any of the following symptoms occur then you should return or be brought back to the hospital or the hospital telephoned immediately. Tel (01\*\*\*)\* (24 hours):  
Headache not relieved by painkillers such as paracetamol  
Vomiting  
Disturbance of vision  
Problems with balance  
Fits  
Patient becomes unwakable

### Children

Your child has sustained a head injury and following a thorough examination we are satisfied that the injury is not serious. Your child may be more tired than normal  
Allow him/her to sleep if they want to  
Give Calpol or Disprol (paediatric paracetamol) for any pain or headache  
Try to keep your child resting for 24 hours  
If your child should develop any of the following:  
Headache not relieved by Calpol or Disprol (paediatric paracetamol)  
Vomiting  
Altered vision  
Irritability  
Fits  
Becomes unwakable  
bring him/her back to the hospital or telephone for advice immediately: Tel (01\*\*\*)\* (24 hours)

in multiple languages. There is a need for more research into head injury cards, but we believe that the introduction of a national head injury instruction card would enhance the card's value for patients and aid research. Our suggestion is given in table 5. The card has been given to a series of A&E department attenders in our hospital: 40 were given the adults' advice card and 20 the children's advice card. We determined that 12 were unaware that a patient who had sustained a head injury could be given analgesia, and nine did not realise that it was acceptable to allow a child to sleep following a head injury. None of the 40 had problems in understanding the card.

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