The quality of trauma care needs urgent improvement

Trauma remains the third most common cause of death worldwide and the leading mode of death in the first four decades of life. In England and Wales, injury is responsible for 10 000 deaths per year (Trauma Audit and Research Network, 2008). As the incidence of trauma is particularly high in the younger population, an average of 36 life years are lost per trauma death (Chiara and Cimbanissi, 2003). Furthermore, trauma is also a major cause of debilitating long-term injuries. For each trauma fatality, there are two survivors with serious or permanent disability. Trauma is, therefore, not only a leading cause of death but also a large problem for society and the economy.

There is a body of evidence pointing to the fact that trauma care in the UK is not good. Studies have shown that many trauma deaths are avoidable (Anderson et al, 1988) and that the likelihood of surviving severe trauma is lower in the UK than in the USA (Yates et al, 1992). The latest National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report may therefore come as no surprise (NCEPOD, 2007). This study provided a detailed analysis of almost 800 cases of severe trauma presenting to hospitals in England, Wales, Northern Ireland and the offshore islands over a 12-week period in 2006. The results make sobering reading: less than half the patients received good care, one in four hospitals had no organized trauma response, consultant involvement was low and delays to definitive management (particularly in neurotrauma) were common. What is particularly disappointing is the fact that many of these findings are similar to the situation found almost 20 years ago.

These findings may not surprise those with some insight into the trauma process that many severely injured patients are subjected to. Indeed, the group of practising clinicians that NCEPOD used as advisors in the peer review process of trauma cases were remarkably sanguine about the high incidence of poor care – indicating perhaps that we have accepted this sorry state of affairs as the best we can do.

There have been improvements in outcomes for severely injured patients in the UK over the period 1989–2000 (Lecky et al, 2002). However, analysis of the data by time revealed that this occurred in the early 1990s and that no further improvements could be demonstrated from 1994–2000. The reasons for past improvements are likely to be multifactorial including more widespread adoption of advanced trauma life support (ATLS) and improved input of consultants. However, the inescapable fact is that trauma care is still not providing severely injured patients with the best chance of survival and that this has persisted for many years.

It is unlikely that any clinician wishes to provide poor care, but the evidence suggests that most clinicians involved in the trauma care process are contributing to just that. The reasons for such a poor system are worth closer examination.

Incidence of trauma

As shown by NCEPOD, the incidence of severe trauma is quite low. Many hospitals saw only one or two severely injured patients over the 12-week study period and only 12 out of 141 hospitals saw one or more severely injured patient per week. With this level of exposure to these difficult cases it is not surprising that outcomes are less than optimal. In addition, good trauma management requires rapid access to a multidisciplinary team, diagnostic facilities and definitive care. It is unlikely that this can be delivered consistently on a 24/7 basis if such services are only required four or five times per year.

Consultant involvement

Consultant involvement in the NCEPOD study was low. Only 27% of patients were seen by a consultant immediately and 42% were never seen by a consultant while in the emergency department. The majority of trauma cases presented out of hours – when it was least likely that consultant staff would be available. Competing interests for consultant time during working hours and lack of sessional commitments to trauma care out of hours appear to be some of the obstacles to greater consultant involvement.

Prehospital airway problems

The incidence of failed intubation was high (16%) – 85 patients arrived at hospital with a partially or completely obstructed airway and 131 were intubated immediately on arrival at hospital. It appears that the current structure of prehospital care, and in particular prehospital airway management, is insufficient to meet the needs of this small number of challenging patients.

Surely we cannot accept that this is as good as it gets for trauma care in the UK (Lecky, 2002). The NCEPOD report contains many recommendations for improving the process of trauma care within hospitals and trusts that are within the scope of trusts and clinicians to deliver. However, it also makes recommendations regarding the structure and organization of trauma services on a regional basis that are outwith their scope.

Reconfiguration of trauma services to provide a system of trauma centres supporting smaller local hospitals has been taken forward in many other countries. Indeed this system has been recommended and supported by the Royal College of Surgeons for many years (Royal College of Surgeons of England and British Orthopaedic Association, 2000). Despite evidence of clinical benefit of this model (Celso et al, 2006), support from Royal colleges and the knowledge that current trauma care in the UK is poor, there appears to be no appetite for change.

Conclusions

Major changes to the structure of trauma care cannot be delivered from local plans. A central integrated plan, supported by top-down implementation, is required. While this model will be attractive to

those who wish to see trauma care improve, it is well known that changes to current provision are often portrayed as closures and cuts rather than enhancements, and the political fallout of changing local hospital provision can be very emotive.

Change is often resisted simply because it is disliked rather than because of a real disagreement with the planned changes. This is not an isolated reaction by patients. It is rare to hear clinicians say that their own hospital does not provide the best care (as a result of organizational factors) and that patients may be better off treated in a different model of care. This is an understandable sense of loyalty to the organization for which they work. However, it is essential that clinicians and the local population are aware of the shortcomings in organized trauma care that exist nationally. Moreover, they need to be aware of limitations in care that they may be able to offer at, or expect from, their local hospital and the potential impact this will have on patient outcome. BJHM

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KEY POINTS

- The management of severely injured patients in the UK is poor.
- Consultant involvement in the management of these patients is low.
- The current structure of trauma care does not meet the need of the patients and change is urgently required to a regional model of care for trauma patients.

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