

department service delivery throughout Australasia. We now have a much better picture of the work that our departments do and the typical casemix pattern of different types of hospital. As Doherty confirms, there is a typical distribution of triage categories for different types of hospital which is remarkably consistent nationally.

However, while the NTS has been well tested over large populations of data, there is important work to be done in improving case-by-case reproducibility. The relatively new luxury of highly detailed and easily accessible data has made people acutely aware of comparisons with other institutions and the potential uses of data. Our attention has now appropriately progressed from the wider focus of large databases to the more precise focus of individual variation. Doherty's letter reflects this change and he is correct in stating that local variations must be either explained or standardized.

Much of this work has already begun. The ACEM is already working with representatives of emergency nursing towards a common understanding of triage policy, with much more detailed clinical descriptors for the categories and elaboration of the agreed 'rules'. Work done by contributors such as Whitby⁴ and Smart⁶ will be incorporated into this process. We are also working with both State and Federal Government casemix experts in an attempt to arrive at an improved understanding of the NTS categories.

There is also active work being done aimed at improving triage training, using systems such as the one developed by the Manchester Triage Group as a model (although, as Doherty states, the United Kingdom target waiting times are not acceptable in Australasian practice).

Doherty's letter summarizes many of the issues that remain to be clarified, such as the triage categorization of major trauma, ambulatory patients and paediatric patients. It is important that we all understand and use the same 'rules'.

So Dr Doherty's letter and my response present two sides of the same coin. The widespread concern about individual variability and the need for standardized triage guidelines must be acknowledged and acted upon. However, we must do this work bearing in mind that the ACEM NTS is a well-tested clinical and casemix tool that has made a huge international contribution to the practice and understanding of emergency medicine. Let's recognize all these points, and work towards making this important tool even better.

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Emergency sedation intubation

I admire the courage of Sams and Kelly¹ in publishing their data on emergency sedation intubation (ESI). The introduction of such pharmacology in the critical care pre-hospital setting without prior evidence of its safety or efficacy is game, to say the least. The paper reports a success rate of 94.5% (73.6% on first attempt). This represents a failure rate of 1 in 20 and Sams and Kelly compare this with other studies quoted where neuromuscular blocking agents have been used, presumably as part of a rapid sequence induction (RSI). However, failure rates for RSI below one in 500 have been reported.²⁻⁵ The report identifies the problem of haemodynamic instability induced by high dose sedation as a disadvantage of ESI. Use of neuromuscular blockade in RSI enables judicious use of induction agents, limiting the risk of hypotension.

No data is provided on oxygen saturation during the procedure, nor time to intubation. Compared with suxamethonium in RSI, diazepam in ESI has a slow, unpredictable onset and a prolonged duration of action. I believe this to be even more important than the success rate of intubation or the haemodynamic instability. The time from commencing induction to the

achievement of adequate muscle relaxation for successful laryngoscopy is critical in reducing the risk of hypoxia and aspiration. This is especially so in emergency intubation where pre-oxygenation may give only limited oxygen reserve and the risk of aspiration is ever-present. Hypoventilation and even apnoea will occur before adequate airway muscle relaxation. Ventilating the patient during this time increases the risk of gastric distension and regurgitation.

If intubation fails, the longer the recovery time, the greater the risk of airway obstruction and aspiration. A key factor in the continued use of suxamethonium in RSI instead of rapid onset non-depolarising agents is its short duration of action. This enables rapid recovery of airway and respiratory muscle function. Both morphine and diazepam can be 'reversed' with naloxone and flumazenil, respectively, but this further complicates the pharmacological management.

Hypoxia during a prolonged intubation is a major secondary insult in a head-injured patient, especially when combined with hypotension. It is hypoxia and hypotension that kill, not failure of intubation. Pharmacology that increases the risk of hypoxia and hypotension should be abandoned. Rapid-sequence oral intubation using neuromuscular blockade is the safest, quickest and most efficacious means of establishing a secure airway. Emergency airway management in North America followed a convoluted path before 'discovering' RSI. Let's not repeat that experience in Australasia.

Finally, might I suggest an alternative to the considerations of adding neuromuscular blockade to paramedic protocols or introducing surgical airway techniques. Add an emergency physician to the flight crew.

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Emergency sedation intubation: Reply

We thank Dr Bishop for his comments. Although the retrospective nature of this study did not allow collection of as much detailed data as might have been ideal, our aim in reporting this research was to provide some objective data about the practice and outcomes of emergency sedation intubation (ESI) on which further debate or investigation could be based. Dr Bishop points out the potential adverse effects of the use of morphine and diazepam in relatively high doses to facilitate endotracheal intubation. We agree that the risks of this approach, particularly for the brain injured, are significant. As stated in our paper, we believe that a review of the protocol for drug-assisted intubation is warranted. There is now good evidence that rapid sequence intubation techniques using suxamethonium are safe in the hands of paramedics. This method would also avoid many of the potential adverse effects of ESI.

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Emergency physicians' role in managing HIV seroconversion illness: Take stock or take HAART?

Cannon and McCarthy¹ propose emergency physicians adopt an 'enhanced role' in the management of 'HIV seroconversion illness'. The latter is a mundane set of symptoms and signs 'legitimized' by 'HIV-specific antibodies' which 'usually develop 2-6 weeks after onset of symptoms'. To obtain antigens and the HIV genome and determine the specificity of the HIV antibody and RNA tests, first one must purify, that is isolate, the HIV particles.

Although both Montagnier and Gallo claimed such proof in 1983/84,²⁻⁴ neither group published electron