PREHOSPITAL CARE

Prehospital anaesthesia in the UK: position statement

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Prehospital anaesthesia is carried out regularly by a small number of prehospital care practitioners in the UK. Although mostly predictable, prehospital disorders can be more difficult than those in hospital, and, in addition, peer and skilled anaesthetic assistance is usually not available. Hence, patient safety should be given paramount importance, and systems need to be in place to ensure that the highest standards are achieved.

The exact proportion of patients with trauma who require early airway intervention is unclear, but is likely to be relatively small.¹ A large proportion of patients who require urgent tracheal intubation do not receive it until their arrival in hospital, which may result in suboptimal care.¹ Rapid sequence induction (RSI) with oral intubation followed by maintenance of sedation is the technique of choice in the emergency department, and, where resource and skill permits, in the prehospital phase.^{1,2} Most UK prehospital practitioners cannot and should not practise prehospital anaesthesia. Those practitioners who do not have competence in RSI or who operate outside an appropriate supporting system may make significant contributions to the management of most injured patients without this skill, and should not be in any way pressured to perform the technique without appropriate training, resource and local support.² When patients with airway compromise are encountered, oxygenation should be attempted with simple airway manoeuvres, meticulous bag-valve ventilation and rescue devices (eg, the use of supraglottic airway devices familiar to the individual practitioner).

Individual competence

Prehospital practitioners should not practise prehospital anaesthesia in professional isolation. Prehospital practitioners have the same level of training and competence that would enable them to perform RSI unsupervised in the emergency department.^{3,4} RSI is well recognised as a potentially hazardous intervention, and considerable time has been spent in ensuring that anaesthetists and non-anaesthetists who perform RSI in hospital can do it safely. Standards in prehospital care should be the same. Practitioners They should perform RSI regularly and frequently enough to maintain competence. The definition of “regular” and “frequent” is difficult, and the competence of the individual should be assessed by the lead clinician of the prehospital scheme. In the UK, this is likely to require regular in-hospital practice.

PROCEDURAL SEDATION

There are occasions when sedation and analgesia are desirable outside hospital to ease extrication, splinting and other procedures. Concern has been raised in numerous documents and publications about the potential for complications when performed (in hospital) by non-anaesthetists.⁵ Prehospital sedation should not be undertaken lightly; in critically unwell patients, prehospital practitioners must be aware of the potential of sedation to lead to deterioration and the need for urgent RSI, and should be competent to perform it.

Local organisation

The local prehospital organisation (this may be an immediate care scheme, a hospital-related scheme or an ambulance service trust-related scheme) should provide the support to practitioners practising RSI:

- A named responsible lead clinician who ensures responsible competency-based practice and regular review/appraisal of practitioners.
- A clinical governance structure, which includes regular case review, audit, an adverse event reporting system, and regularly reviewed guidelines or standard operating procedures.
- Equipment should be adequate for the purpose and maintained to the same standard as ambulance service or in-hospital equipment. Minimum standards of monitoring should be the same as for in-hospital anaesthesia.⁶
- Anaesthesia in hospital should be only conducted in the presence of an appropriately trained assistant. The same standards should apply in prehospital care. The prehospital team that provides anaesthesia should provide an appropriately trained assistant. Paramedics with a critical care qualification or with competency-based training can fulfil this role.

Summary

Although early intervention in several patients with trauma is desirable,¹ poorly performed RSI can result in unnecessary morbidity and mortality.⁷ The procedure should be only performed by appropriately trained and competent practitioners working in a properly structured prehospital system. A multispeciality working party has been set up recently by the Association of Anaesthetists of UK and Ireland to consider the issues of prehospital anaesthesia in detail, and will submit its report in due course.

Abbreviation: RSI, rapid sequence induction

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