

Correspondence

Safe combined intravenous opiate/benzodiazepine sedation for TEE



Our recent articles^{1,2} on the optimal sedation strategy for transoesophageal echocardiography (TEE) have created much interest leading to calls for a clarification in current policy from the British Society of Echocardiography and the British Cardiovascular Society.

We print here excerpts from the letters we have received. This correspondence is published in full in our latest issue online (visit www.bjcardio.co.uk and look for the correspondence section).

Dear Sirs

The survey data presented in the recent article by Manika *et al.*¹ show only 6% of the UK hospitals questioned the use of opioids in combination with midazolam, perhaps with good reason. A previous study by Bailey *et al.* investigated the effects of midazolam and the opiate fentanyl in volunteers. The study noted that at the time of publication, 78% of deaths associated with midazolam were respiratory in nature, and 57% involved opiate co-administration. They concluded that the combination should only be used if persons skilled in airway management are present.

The Royal College of Anaesthetists working party specifically state: "Combinations of drugs, especially sedatives and opioids, should be employed with particular caution...there may be potentially dangerous synergistic effects when they (opioids) are used in combination with sedatives". The National Patient Safety Agency comment: "Adverse events occur more commonly when drug combinations are used, for example, midazolam with pethidine or other opioid drugs....." (full text of letter available at www.bjcardio.co.uk)

R Bruce Irwin
Wythenshawe Hospital, Manchester

Dear Sirs,

Mankia *et al.*¹ are to be congratulated for introducing a sedation protocol for transoesophageal echocardiography (TEE) in their institution¹. They also call for a national strategy for TEE sedation that incorporates both an opiate and benzodiazepine. It has been a source of amazement to those responsible for sedation by non-anaesthetists in individual Trusts, as a result of the Academy of Medical Royal Colleges (AoMRC) report published in 2001, that whilst the specialist societies, or Colleges of all of the other specialty groups who carry out sedation have produced guidelines for their members, this is not the case for cardiologists. It is time they caught up..... (full text of letter available at www.bjcardio.co.uk)

This small study rightly highlights the desperate need that cardiologists have for national guidance on sedation in their practice from the British Cardiovascular Society and the British Society of Echocardiography.

David N Hunter and Jonathan Lyne
Royal Brompton Hospital, London

Dear Sirs,

We read with interest the recent article by Mankia *et al.*¹ and cannot help but agree with the accompanying editorial by McCormack² that the quoted complication rate of 6/151 requiring resuscitation with intravenous fluids and 2/151 requiring benzodiazepine reversal with flumazenil as concerningly high for a proposed 'safe' protocol.

At our centre we make considerable effort to reassure and calm the patient prior to sedation and then use a simple technique (full text of letter available at www.bjcardio.co.uk)

The mantra we should all be aiming for is to deliver a dose of sedation that is 'As Low As Reasonably Practical (ALARP)'. Good patient communication can dramatically reduce anxiety levels allowing lower doses of benzodiazepines to be used. This, in turn, allows intubation to be performed with the cooperation of the patient, obviating the need for opiates. Success rates from this approach are high and complication rates are minimal and the low doses used and avoidance of long-acting agents such as pethidine allow the patient to be safely discharged shortly after the procedure having had an explanation of the results.

Gareth Wynn and John Somauroo
Countess of Chester Hospital, Chester

The authors reply

We read with interest the responses to our article¹ and are pleased that there is a general consensus about the need for guideline-led transoesophageal echocardiography (TEE) sedation practice. The responses also demonstrate some centres are leading the way in providing such an approach. Nevertheless, a major aim of our study was to investigate current sedation practice for TEE over the whole of the UK and the results suggest these responses are not entirely representative of wider practice.

Our protocol was offered as an example of a local solution and the responses offer some important modifications that would allow progress towards more widely applicable guidance.....(full text of letter available at www.bjcardio.co.uk)

Julveer Mankia and Paul Leeson
John Radcliffe Hospital, Oxford

References

1. Manika K, Navickas R, Nicol ED, Bull S, Khan J *et al.* Safe combined intravenous opiate/ benzodiazepine sedation for transoesophageal

echocardiography. *Br J Cardiol* 2010;**17**:125-7.

2. McCormack T. Should the BSE collaborate with the BSG on intravenous sedation? *Br J Cardiol* 2010;**17**:103.