

Thoracic epidural anesthesia in cardiac surgery - Current standing

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The Editor,

We read with dismay the unilateral vision of an invited editorial in your recent issue.^[1] The author of the editorial has contradicted himself, repeatedly, in an endeavor to prove the use of epidural wrong. The sentence about the beneficial effect of epidural is contradicted by him in a subsequent paragraph where he questions “how important is it to obtain a good quality pain relief after double valve replacement in an 80-year-old gentleman with multiple co morbidities”. Our answer would be - quite important. The question is not whether one should provide analgesia after surgery or not. There is no choice. Anyone causing pain is obliged to relieve it. Pain is an unpleasant and unique physical and psychological experience with untoward postoperative impact. Providing pain relief is a mandatory requirement according to World Health Organization (WHO) guidelines. The WHO suggests that training and execution of pain treatment is inadequate. A dossier released by WHO, states, “There is a bias among surgeons to operate, anesthesiologists to do pain procedures, physiotherapists to emphasize function improvement and psychiatrists and physiologists to prescribe medication and behavior-modification techniques”. This reflects a particular physician’s education and training. The medical curriculum does not have a common plan of pain management and uniform nomenclature of various pain states. Therefore there is a strong need for the WHO to develop guidelines using a multidisciplinary approach.”^[2] This statement describes the attitude of the author appropriately. We agree that a suitable pain therapy mode for such patients, other than epidural, may not yet be available. However, that in no way permits the author to promulgate that pain relief is not required in a particular group of patients.

It may be recalled that several decades ago

anesthesiologists believed that neonates and infants needed no pain relief. This concept, over years, has been proven completely wrong. It was thought that neonates did not experience or remember pain due to their immature nervous system. Subsequent studies showed that these responses develop much earlier than expected.^[3] Pain in the immediate postoperative setting in neonates and children, can lead to deterioration in the patient's clinical condition.^[4] We would differ from the author who suggests no pain relief is required in an elderly gentleman.^[1]

As an anesthesiologist, one is always drawn to this irresistible thought that we lack confidence in handling complications. Instead of refining the procedure of epidurals, we talk of abandoning an otherwise good procedure – which only shows an anesthesiologist's inability to cope with complications, if they occur. In our opinion, there is no one single technique used in cardiac anesthesia which has so many real and potential benefits namely, improved perioperative and postoperative analgesia, attenuation of the stress response to surgery, induction of thoracic cardiac sympathectomy, improved myocardial metabolism, earlier extubation and a smoother postoperative course with decreased risk of lower respiratory tract infections and supraventricular arrhythmias, following cardiac surgery, abolition of the cortisol response and improved hemodynamic stability.^[5-6] We should think twice, before abandoning it as a tool without potential benefits but with increased risks.^[1]

Thoracic epidural anesthesia should be used as a novel trigger in more well designed multicentric trials, to its full capacity, in the multimodal strategy to optimize faster patient recovery after cardiac surgery.

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REFERENCES

1. Chaney MA. Thoracic epidural anaesthesia in cardiac surgery – The current standing. *Ann Card Anaesth* 2009;12:1-3.
2. Kumar, Report of a Delphi Study to determine the need for guidelines and to identify the number and topics of guidelines that should be developed. WHO, Geneva, June 2007
3. Zacharias M, Watts D. Pain relief in children. *BMJ* 1998;316:1552-60.
4. Royal college of Paediatrics and Child Health, guidelines for good practice – recognition and assessment of acute pain in children, RCPCH 2001.
5. Scott NB, Turfrey DJ, Ray DA, Nzewi O, Sutcliffe NP, Lal AB, *et al.* A prospective randomized study of the potential benefits of thoracic epidural anaesthesia and analgesia in patients undergoing coronary artery bypass grafting. *Anesth Analg* 2001;93:528-35.
6. Hemmerling TM, Carli F, Noiseux N. Thoracic epidural anaesthesia for cardiac surgery: are we missing the point? *Br J Anaesth* 2008;100:3-5.