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Editorials

Safety in anaesthesia – Nepali perspective

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Even after more than 150 years of introduction of anaesthesia, most lay persons are worried about being anaesthetized. In the early days anaesthesia was a dangerous, unpleasant experience. The pioneering work of many anaesthetists and the pharmaceutical industry by developing a wide range of medicines, has today transformed anaesthesia to be a safe, effective and hopefully pleasant experience.

The problem of safety and accidents prevention is a primary issue in modern anaesthesia [1]. Though the specialty of anaesthesia has made extraordinary advances in terms of safety, the anaesthetic mortality and morbidity still continue to be far from acceptable. Efforts to enhance safety in anaesthesia must include adherence to explicit and implicit safety standards, must make use of equipment that offers modern safety features, must seek to detect and correct developing safety threats as early as possible [2]. There must be a structured system to analyse problems and to institute remedies to prevent recurrence and human error.

Till the end of 1990 the mortality and morbidity due to anaesthesia was quite high. It was almost 1: 10,000. Now anaesthesia morbidity and mortality, while acceptable, are not zero. The figure has currently come down to 1: 2, 50,000.

In Nepal, the first hospital was established in 1889 and anaesthesia service used to be delivering by any one who was available. Since 1933, this responsibility was given to Dr. Bhawani Bhakta who ultimately received his anaesthesia training in Bombay in 1954. In those days as in a developed country, mortality and morbidity due to anaesthesia were quite high. Modern anaesthesia techniques and proper equipment were introduced in Nepal in 1966. Anaesthesia training at Diploma level started in 1985 and Master degree in 1996. This helped more and more trained manpower to join the department. All this helped better outcome. At present we can compare our results to that of Western world. In this regard the contribution by Canadian anaesthetists cannot be forgotten.

Anaesthesia-related risk has been significantly reduced within the last decade. Nevertheless the risk and the possibility of dying or suffering permanent damage still exist. To improve patient safety, risk assessment and analysis must lead to the development of preventive strategies [3].

Present anaesthesia specialty has focused on the safety of the patient and prevention of untoward outcomes. In medically advanced countries serious injuries are now rare. Still, anaesthesia deaths and complications are important because the anaesthetic itself has no intended therapeutic effect.

Anaesthesia today is a cross-over of all medical sub-specialities, based on a stable scientific fundament and has a high margin of safety [4]. Anaesthetic techniques are sophisticated and enable a differentiated treatment at pre-, intra- and post-operative period to meet the medical demands. Anaesthetists are more or less now recognized as perioperative physicians.

The present improved safety in anaesthesia in Nepal is due to proper training of anaesthesia clinicians, availability of new pharmaceuticals, new technologies for monitoring (especially pulse oximetry and capnography) and maintaining standards for monitoring and other aspects of anaesthesia care.

The essentials for safe anaesthesia in any situation include adequate pre-operative assessment, preparation and resuscitation of patients, reliable intravenous access, a pleasant and safe induction, a secure airway, adequate tissue oxygenation, appropriate monitoring, and rapid recovery. The three violations commonly done by anaesthetists are: failing to visit patients before surgery, failure to perform pre-anaesthetic equipment checks and the silencing of alarms during anaesthesia [5].

Safety is a never-ending battle that requires continued effort because many forces have the potential to diminish whatever progress is made. Anaesthesia and surgery is not safe in itself, and the presence of the anaesthetist during this period, carefully monitoring and recording all events, is an essential part of the safe conduct of surgery.

Satisfying the interest and welfare of the patient is of prime important because we are called upon to do the best job possible. Despite our expanding role, we are

often unrecognized or misunderstood by our patients, our colleagues, and the public. Patients find it difficult to develop a perception of the anaesthetist as a physician or human being. Many of our medical and surgical colleagues fail to recognize the contribution anaesthetists make as physicians, perceiving the practice of anaesthesiology as a procedure that is not patient oriented.

Lastly the motto of all anaesthesia professionals should be: "No patient be harmed by anaesthesia".

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