

## A Prospective Audit of Critical Incidents in Anaesthesia in a University Teaching Hospital

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### Abstract

**Introduction:** We aimed to reduce mortality and morbidity in anaesthesia by identifying common factors contributing to critical incidences and 'near misses'. **Materials and Methods:** We carried out a prospective survey over a 2-year period from May 1999 to April 2001 of all reported critical incidents in patients undergoing anaesthesia. Critical incidents were reported anonymously, using the Anaesthetic Incident Monitoring Study form. This consisted of structured questions with tick box answers. Completed forms were reviewed and after open discussion with the department, preventive strategies and guidelines were developed and introduced. **Results:** A total of 116 critical incidences were reported in 108 patients. These are events that have resulted or could have resulted in an adverse outcome for the patient. Airway incidences were the commonest incidence reported (33.6%), followed by pharmacological problems like wrong drug or dose (28.4%). These occurred most often during maintenance and recovery from anaesthesia largely due to human factors like inattention, haste and failure to check equipment. They were preventable in 76% of cases. As a consequence, 33.6% of incidents resulted in cardiac arrest or major physiological change. There was no adverse outcome in 36.2%. From a review of the critical incident reporting, organisation of manpower was improved to ensure adequate supervision of junior staff. Checking of equipment and drug before use was constantly emphasized. **Conclusion:** Critical incident reporting is a useful tool for quality assurance programmes. It analyses human and systems problems to ensure improved patient care.

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**Key words:** Contributing factors, Critical incidents, Morbidity and mortality

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