Reporting anaesthetic morbidity: An Australian story

Patricia Mackay
Consultative Council on Anaesthetic Mortality and Morbidity, Albert Park, Victoria

The first 100 years following the introduction of general anaesthesia saw almost exclusive attention to reports of mortality, the majority associated with chloroform. After World War 1 anaesthetists did achieve some enhancement of status and single case reports of morbidity were reported in local medical journals but there was no systematic collection. Major reports such as by Geoffrey Kaye in 1929 and 1937 and notably by Gilbert Brown in 1937 were all related to mortality although Gilbert Brown provided for the first time a detailed qualitative analysis of cause of mortality with recommendations for future avoidance

In 1938 Brown also attempted to introduce morbidity reporting through the Newsletter of the newly formed ASA but World War 2 intervened. It was early in the 1950s before interest in reporting adverse events revived, particularly stimulated by the publication of Beecher and Todd of a review of 600,000 anaesthetics in university hospitals in the USA. Australian anaesthetists were then encouraged to send case reports of unusual morbidity to international rather than local journals, which proved to have far reaching consequences on later anaesthetic practice worldwide. Notable were the initial reports of deleterious effects of Nitrous Oxide, anaphylaxis to anaesthetic agents, malignant hyperthermia and cardiac arrest associated with use of Suxamethonium in burns.

The 1960s saw the introduction of government support for mortality reporting, first in New South Wales and later in all other States. However in Victoria in 1976, due to powerful lobbying by Kevin McCaul, probably influenced by Geoffrey Kaye, terms of reference of the Victorian Consultative Council on Anaesthetic Mortality and Morbidity (VCCAMM) included evaluation of morbidity as well as mortality and still is the only organisation with State Government support for systematic morbidity reporting. Referrals were slow at first but, as anaesthesia related mortality has significantly fallen, evaluation of morbidity has become an essential exercise in light of the many new techniques in surgery and anaesthesia. Evaluation of morbidity now constitutes the major proportion of work of VCCAMM

A major shortcoming has been that until recently voluntary reporting resulted in incomplete data for numerator and denominator. In Victoria the 2009 Health and Wellbeing Act now mandates reporting of significant morbidity and access to hospital records although the response so far has been variable

A critical issue is confidence in the provisions for confidentiality and the management of the data. Information on mortality is frequently in the public domain but reporting anaesthetists are more concerned about medico-legal implications associated with morbidity and for this reason some surveys have never been published. However direct feedback and external peer review is considered by VCCAMM to be an essential component of the program. In addition to direct communication with the anaesthetist, 10 reports have been distributed widely and an article on a 15 year review published

In the 1980s pursuit of quality was finally recognised worldwide and Australia continued to lead with the development of the Anaesthesia Incident Monitoring Study (AIMS) which collated problems arising from critical incidents, resulting over the next 20 years in many publications and in the development of a crisis management manual. However morbidity was not specifically studied. By 1990 anaesthetists worldwide recognised the importance of study of anaesthesia related morbidity and many publications identified specific issues or reported closed claims studies.

The 21st century has seen an enormous proliferation of quality assurance and risk management programs in specialist medical organisations, hospitals, coronial services and in government. The Royal College of Anaesthetists has conducted landmark studies in airway management and epidural analgesia and there are many reports of individual hospital surveys.

In 2009 the Australian and New Zealand College of Anaesthetists and the corresponding Anaesthetic Societies have undertaken an ambitious program of data collection which is still in its infancy and outcome data is yet to be revealed. Duplication of data with so many simultaneous programs is a possibility. Of greater concern is the proliferation of hospital quality assurance programmes that exclude anaesthetists in discussion of relevant issues. Thus it is critical for the specialty to continue to maintain complete independence in all future programmes.

However our specialty can remain proud that it was a leader of the field of adverse event analysis for over 50 years

References:
