Surgical Audit

Surgical audit can be defined as the systematic review of surgical practice with the objective of recognizing deficiencies and improving standards of care. In effect this means collecting data on all patients treated including details of adverse outcomes such as deaths and complications. The results are subjected to weekly or monthly review at an audit meeting. Recommendations can then be made so that mistakes are not repeated and standards of practice are maintained and where necessary, raised.

During a recent visit to India I questioned a variety of surgeons about their experience of surgical audit both in their own practices and in India in general. All felt that having access to figures for mortality and complication rates was important. Very few said this information was available. They expressed the view that though their own practices were in order, they treated many patients who suffered as a result of poor practice elsewhere. Estimates from various hospitals ranged from 1 to 15 such cases per month. Although the majority of surgeons from teaching centres stated that some form of audit was carried out in their own hospital they expressed the view that only 0% to 30% of hospitals in their state regularly carried out similar reviews. The figure varied widely from state to state. In spite of feeling that surgical audit was desirable many said that no framework for carrying it out was available. In particular very few hospitals had computerised data collection systems.

Many surgeons in India would argue that audit is all very well for surgeons in the West or teaching centres in India but they are far too busy to be able to monitor and criticize their practices in this way. Additional problems exist because the system of maintaining medical records is unreliable and the practice of patients keeping their own notes is so widespread. Besides these problems, collecting information about adverse events and discussing them publicly may invite external criticism and make life unnecessarily difficult. Until recently a majority of surgeons in Britain would have forwarded similar arguments. However, all British doctors are now required to audit their practices. Fortunately, the Government has had the sense to realize that this is best done by the professionals themselves. A centre which does not undertake an audit is not recognized for training junior staff. The previous fears of surgeons appear unjustified as findings from the surgical audits are proving to be both educational and valuable.

The essence of surgical audit is that regular meetings should be held to review recent practice. In order to do this data must first be collected. It is possible to do this manually by keeping a diary record of all patients treated, and marking each entry with simple one letter codes for diagnostic groupings, type of admission and complications. Overall figures for any period can then be produced and details of patients with complications retrieved from the treatment notes. If the notes are not usually stored in the hospital then it will be necessary to make a special audit record about those patients who develop complications and to keep this separate from the patients’ notes.

A more efficient method of data storage is to use a database on a computer. This might be a more reliable way of storing audit data in India than trying to retrieve patients’ records. In England such systems rely on the fact that data about each hospital admission is routinely transmitted to the patients family doctor in the form of a letter or discharge summary. If this data is entered into a computer the information can then be retrieved as a printout for an audit meeting. The more routine tasks the data can be used for, the more efficient the system becomes. Other such routine tasks include the production of operating lists, waiting lists and other types of correspondence about patients. In developing audit software the important principle is that the machine should be an aid to the work of the surgical unit and not impose an added burden. In order to achieve this it is essential to keep the number of items of data collected to an absolute minimum.
Having collected the data, an audit meeting should be constructive and not allowed to develop into a witch-hunt. The latter simply leads to the suppression of the truth. Patients’ and surgeons’ names should not appear on any handouts. All problems should be discussed with the emphasis being kept on the need to make recommendations to improve future practice. Such recommendations should be written down and circulated to participating surgeons. Now and again, previous recommendations should be reviewed to check if they have been carried out.

Once audit data are easily available a need arises for comparisons to be made of one’s own results with those of similar units. The Royal College of Surgeons of England has recently set up a Confidential Comparative Audit Service for this purpose. At an experimental meeting for general surgeons in June 1991, 160 surgeons completed a proforma giving their audit results for 147 882 admissions during 1990. These included 122 620 operations. There were 2539 deaths and 6101 reported complications (6%). The individual surgeon’s own results were ranked in a series of 40 charts which showed his position relative to all others in terms of operating sessions and manpower available, complexity of cases treated, and deaths and complications produced. The whole exercise was carried out anonymously with surgeons only being identified by a confidential number. As a result, each participant was able to compare his results with the others and learn more about the achievements or otherwise of his practice. A survey of 40 surgeons who were able to attend a meeting to discuss the results showed that 96% found the exercise useful and all wished to continue it in future years. One quarter of the surgeons were surprised at the relationship of their data to the whole and 16% had instituted changes in their practice within two months of the meeting. Over 320 surgeons have indicated a desire to participate next year. Similar meetings for orthopaedic and ENT surgeons have also taken place. These meetings gave a preview of how surgeons and patients might benefit from the routine collection and comparison of audit data.

Five years ago in the UK, any such meeting would have been impossible and the fact that 160 general surgeons are already able to take part shows that progress is being made. In the near future it seems that the majority of surgeons will be regularly auditing their results and comparing them with others.

In spite of enormous local difficulties Indian surgery has proved to be remarkably resilient when taking on advances made in the West. The capacity of Indians to overcome their difficulties and to introduce surgical advances for the benefit of their patients, regardless of an apparent lack of resources, leaves many Western observers astounded. Indian surgeons must decide whether or not to follow the West in developing audit and thereby encourage the maintenance and spread of the highest surgical standards throughout the country. It is most likely that the providers of healthcare will soon demand some such measures of quality assurance (just as they are now doing in the West) regardless whether or not surgeons decide to pursue audit themselves.

Perhaps the time is coming where all teaching centres should set an example by ensuring surgical audit is part of their practice. India as a whole should begin to regard evidence of regular audit as a mark of a surgeon striving for excellence and part of the qualities which make up a good surgeon. Unless the surgeons of India start doing this, they may find themselves being audited by external agents who are ignorant of surgical practice and unsympathetic to the problems surgeons face.

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