

Editorial

All surgeons are expected to audit their work. This is not only a requirement in Great Britain and in many other parts of the world; it is expected by patients and it is increasingly recognized as an essential ingredient of training as well as a useful teaching technique. How then should audit be undertaken?

Guidance on audit is available from several sources. The Department of Health have published a White Paper (*Working for Patients*) defining audit as 'the systematic critical analysis of the quality of medical care including the procedures used for diagnosis and treatment, the use of resources and the resulting outcome and quality of life for the patient.' In response to this the Royal College of Surgeons of England published guidelines to clinical audit in surgical practice in March 1989. Further publications from the Department of Health and from the King's Fund Centre offer guidance on audit techniques. The most recent of these, '*Speciality Medical Audit*', is aimed at hospital doctors in search of practical ideas for medical audit within their own speciality.

When an audit programme starts it is more likely to succeed if it can be made interesting for all doctors both senior and junior. It does not require sophisticated systems or computers. Case note reviews and morbidity and mortality meetings are common forms of audit. They provide good teaching and they readily lead to improved care. It is suggested that participation of at least three consultant firms is necessary to provide a range of views and comparisons of different forms of management. Random case note reviews are simple to set up. Ideally the notes should be compared against a predetermined standard. Criteria to be assessed might include the following: Was the diagnosis accurate? Were the investigations appropriate? Was the operation note comprehensive? Were post-operative notes written? Were complications recorded? Was the discharge summary accurate? How quickly was it sent? Were the notes legible and signed? It will soon be apparent that records are imperfect. Time spent on improving them will result in better patient care and on better future audit.

Case note reviews may be made more productive if the case notes are screened for predetermined adverse patient events. Alternatively a complications book may be kept on the ward or in out patients to record these. This can form the basis for mortality and morbidity meetings. Recorded morbidity and mortality rates are low in ENT surgery. This may in part be the result of under recording of complications or may simply be a fact of the type of surgery performed. When regular audit meetings have been held topics that invite further more detailed study will suggest themselves. It may help to consider an audit cycle; first, set an objective, ask what aspect of management you would like to study, and how you will go about it. Study relevant literature. Second, collect and analyse infor-

mation. Third, evaluate results. Fourth, review the objectives of the study and make changes in the light of the results. Fifth, repeat the process to evaluate the affect of change.

Occasional repetition of an audit is helpful in completing the audit cycle and demonstrating the effect of change. It is however necessary to vary audit and to introduce outside comparison to maintain interest. Comparative audit between departments requires common agreement on terms. This may be encouraged by using a common system of classification. The British Association of Otolaryngologists has published a list of operations and diagnoses for use in audit. This list which contains appropriate OPCS, ICD9 and Read Codes may be obtained from the ENT Department, Royal Sussex County Hospital, Brighton, BN2 5BE. This book also provides guidance on coding and definitions.

Collaborative audit on a regional or national basis provides a good yardstick against which to judge performance. The Comparative Audit Unit of the Royal College of Surgeons of England wrote to all consultant ENT surgeons in England and Wales in 1991. Four hundred and five consultants were invited to participate in a confidential collaborative audit. Sixty consultants returned data on 52,208 admissions. This comparative study produced information on workload, manpower, available theatre sessions, bed occupancy, length of stay, diagnostic and operative case mixes. It produced crude mortality rates for all admissions and complication rates. Two topics were selected for more detailed inquiry. Forty-nine surgeons contributed information on myringoplasty. The mean known graft success rate was 65 per cent. The mean known graft failure rate was 11.5 per cent. Hearing was better in 53 per cent, unchanged in 32 per cent, worse in three per cent and unknown in 14 per cent. Eleven per cent of the operations were revision procedures. Of the 60 consultants who returned data only 21 had access to a computerized audit system. Thirty five used theatre records, 49 used patient administration systems, 34 reviewed notes and five used manually kept records to produce their returns. Many surgeons indicated that they would join future collaborative audit though unable to participate on this occasion.

Comparative audit will undoubtedly be helped by the introduction of computer records. Micro computers may be used within individual departments. When several departments use the same software this will facilitate comparison. A common set of data for collection for surgical audit has been proposed by the Royal College of Surgeons of England. Several companies now market software designed for ENT audit by micro computer. Comprehensive hospital information systems may also capture clinical information for surgical audit.

In the 1992 Toynbee Memorial Lecture Smyth empha-

sized the importance of personal audit and long-term follow-up. In a recent report on 605 myringoplasty ears the success rate decreased from an initial 89 per cent. At 11 years only 74 per cent had intact normally healed tympanic membranes without a retraction pocket. The challenge of evaluating surgical procedures is reviewed by Stirratt *et al.* (1992), who suggest that prospective randomized controlled trials are not sufficiently used to evaluate the optimum treatment. They examine the problems of using randomized controlled trials and of audit in surgery and the relative values of the two techniques.

Audit has now been established by both the medical profession and the government as a necessary and integral part of modern medical practice. It is important that surgeons learn the techniques of audit and enthusiastically embrace the discipline to the betterment of patient care.

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