The surgeon and cancer management

The treatment modality of choice for all solid tumours is surgery. The surgeon's responsibility is to remove all macroscopic tumour with a clear margin of normal tissue, to provide information for the pathologist on lymph node involvement (or extent of spread) and hence to assist selection of adjuvant treatment, and to achieve these objectives with a low postoperative morbidity and mortality and an acceptable quality of life. The surgeon should aim for a local recurrence rate of less than 10% and a 5-year cancer-specific survival within (or above) the norm. To achieve this, two principles must be accepted; first, optimum surgical technique, which can only be achieved by appropriate training followed by an obligatory minimum case volume to maintain surgical skills, is a requirement; and second, a quality assured multidisciplinary team environment is a necessity.

Training includes an appreciation of the underlying disease process (tumour biology), detailed knowledge and understanding of the relevant anatomy, care in the surgical excision with fastidious attention to detail, and expert post-operative management both in the short- and long-term.

The surgeon is the key member of the multidisciplinary team but must recognise that he or she cannot work in isolation. The hospital environment is crucial and an appropriate level of resource is essential. For example, major oesophageal and pancreatic surgery cannot take place in an institution which does not have appropriate ITU facilities and expert anaesthesia.^{1,2} Breast cancer management requires up-to-date dedicated pathological assessment to ensure tailor-made adjuvant treatment.

Accordingly, when outcome data are analysed and published for patient information, the 'surgical' results cannot be regarded solely as an indication of surgical expertise and should not be viewed in isolation. Outcome data are a team result. The centre forward may score the goals but his productivity and effectiveness will depend upon the team around him. If he does not receive the ball or is hampered by a strong opposition (the tumour) then, however skilful he may be, he will not be a prolific goal scorer. If surrounded, however, by a first-class team, his effectiveness will be greatly improved. It is unfair for the surgeon to be burdened in isolation with the stigma of poor results. Nevertheless, surgeons should recognise that there is outcome variability, even between institutions with similar excellent facilities. Studies have demonstrated that for common tumours volume relates, in part, to outcome; equally, a low-volume surgeon in a high-volume institution can achieve results comparable to a high-volume surgeon in a high-volume institution.³

Quality core training followed by specialisation must be the prime goal for all surgeons dealing with solid malignancy. It is important to ensure that modern training programmes and philosophy, designed to achieve a trained surgeon in a reduced time interval, can achieve this objective. This will be feasible if oncological specialisation is undertaken and trainees are provided with all possible opportunities – but it must be accompanied by the appropriate institutional and multidisciplinary expertise.

The treatment environment is changing rapidly. I believe it is becoming increasingly important for surgical oncology to become a recognised disease-based specialty. Within the discipline, a surgeon should, in my view, specialise in a minimum of two malignancies. I do not believe there can be a strong argument to support, for example, a 'breast surgeon'. Far better a surgical oncologist, fully trained in a common trunk of general surgery and with a deep knowledge of tumour biology. The surgical oncologist with, for example, a major breast interest should deal with breast/endocrine, breast/melanoma or even breast/colorectal cancer. It is inconceivable that surgical skill will be diminished by adoption of a broader surgical perspective. Indeed, it may be that breast cancer will be treated predominantly by non-surgical means in the near future and, therefore, expertise in surgery of this single tumour will not be in the best interest of the surgical trainee.

Surgical management of cancer requires a quality multidisciplinary team. The discipline of surgical oncology will ensure broad surgical training and an understanding of the disease process in addition to specialist training. It must be recognised that any published cancer outcome data are a reflection of the multidisciplinary team as a whole and not just the surgeon.

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