Leading article

Tailoring surgery to elderly patients with cancer

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As life expectancy increases globally, it has become evident that the most significant independent factor for developing a malignancy is simply longevity. Unfortunately, there is also a correlation between older patients and substandard cancer treatment. EUROCARE-5 has flagged up an unfavourable cancer-related survival rate among the oldest patients[1]. Put explicitly: older people die from cancer as a result of poor treatment.

Despite the widely recognized advantages of multidisciplinary cancer care, with the exception of haematological malignancies, management protocols that include surgery generally offer the highest chance of cure after cancer has been diagnosed. It would be difficult to pass the blame on to medical or radiation oncologists for failing to cure elderly patients; surgeons must therefore take responsibility to accept this as a failure on their behalf to deliver the correct operative treatment at the right time, tailored to the individual patient.

This is no easy task. There is no robust evidence to verify the effectiveness of any treatment in the older age group, as elderly patients have been consistently excluded from clinical trials. Where high-quality evidence from randomized trials is not achievable, one would expect that well conducted, population-based investigations ought to provide clarification. These 'real-life' studies can be extremely informative, but unfortunately are few in number, particularly when concerned with the problems of the older patient[2]. For example it is still not clear whether axillary dissection, sentinel node biopsy or no axillary surgery is the most appropriate option for older women affected by early breast cancer.

Information gained through methodologically well constructed clinical studies does not always apply to the older population, where benefits, side-effects and life expectancy differ substantially from those in younger cohorts[3]. Older patients entered into clinical trials are known to differ from the general population of senior patients[4].

A further problem relates to the physiological complexity of ageing. Most older patients sit between the frail individual, with cognitive impairment and numerous co-morbidities, who takes many drugs and has limited life expectancy, and the superfit centenarian still capable of strenuous exercise with an active social life. Although few would dispute that those in the former group should not be considered for an aggressive surgical approach (overtreatment), and that the latter should not be deprived of this opportunity (undertreatment), the question is how to deal with that majority of patients in between. It is worth remembering that as many as one in two older patients who have cancer are malnourished, have significant cognitive impairment, lack full continence and have poor mobility, whereas one in four have evidence of delirium and major depression[5]. The need to understand how these factors influence surgical outcomes is clearly important.

The clinical decision to operate or not is often purely emotional and subjective. Despite this, surgeons are actually very good at it[6]. Many have an intuitive feel for the general condition of an individual, in whom the likely effects and results of treatment can be envisaged. This perception of well-being and the patient's ability to withstand a proposed treatment leads the surgeon to make the right decision instinctively[7]. However valuable this is, it is clearly not truly dependable. It is not standardized, involves individualized preconceptions, and lacks both objectivity and consistency.

It is on this background that the need for a more objective approach to these patients has become increasingly apparent. Geriatric assessment involves a comprehensive approximate means to measure frailty that allows accurate individualization of treatment and prediction of outcomes. In this way patient consent for interventions, trial designs, the value of specific clinical investigations, and the ability to compare patient cohorts and studies might all be achieved[8]. It is true that, as yet, there is no agreement on the perfect tool, but this is no excuse for not making good use of imperfect tools in everyday practice, in order to develop increasingly robust measures. The history of medical progress is full of examples of tools and techniques that continued to improve while knowledge in the particular field was being expanded. Consider the evolution of the TNM staging system as an example.

Progress has been made in recent years. Geriatric assessment has been proven to influence surgical outcomes, notably length of hospital stay and cost[9]. The development of specific tools that are less time-consuming and that seem 'surgeon-friendly' has meant that frail patients can be identified and their surgical outcomes predicted[8]. Simple measurements such as the Timed Up and Go test, which measures the time taken for a seated patient to rise, walk 3 m, turn around and return to their seat, have shown that twice as many patients can be identified who are at risk of developing postoperative complications than with use of American Society of Anesthesiologists (ASA) grade[10]. Malnutrition has also been shown to be associated with functional impairment in several geriatric domains, underlining the importance of an integrated approach and the potential for preoperative optimization of nutritional status[11].

Improved outcomes that reflect decision-making and treatments individualized (tailored) to a particular patient are eagerly anticipated by clinicians and patients alike. Keeping the patient at the centre of these efforts is vital[12,13], yet there is still uncertainty about what older patients really want from treatment. Are we certain that the consent process rests on a complete, comprehensive understanding from the patient's side? Are our discussions about desired results truly transparent[14]? Ultimately, we must consider whether our social ethos supports equality for older individuals. This issue of *BJS* offers the opportunity to open up this debate and refocuses the attention of the surgical community toward these fundamental issues.

Disclosure

The author declares no conflict of interest.

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