LEADING ARTICLE

MAJOR SURGERY IN THE ELDERLY

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Major Surgery in the elderly: "To operate or not to operate?" – that is the question. Because of the ever-rising cost of medical care and the decreasing availability of health care facilities and funds, results of surgery in the elderly patient are of both medical and social significance. With the increasing age of our Singapore population and the projection of a larger proportion of aged individuals in the years to come, (5.7% in the year 1980, 8% in 1985, 10% in 2000 and 20% in 2030), doctors are to be confronted with this question in increasing frequency. It is for these reasons that Drs Ngian and Nambiar are to be congratulated on their most timely article.

Before endeavouring to address this most vexing issue, a more pertinent question would be the definition of the word "elderly". Should one concentrate on chronological age alone or should the biological age of an individual have a bearing on decision making? In the many papers dealing with surgery in the elderly, including Ngian and Nambiar's article in this issue of the SMJ, emphasis is placed only on the chronological age. Here, the cut-off age is 60 years and above. Other authors have cited 65 years (1, 2) and 70 years (3, 4). While this is a simple enough concept to follow, how often have we been amazed by a spritely octagenarian being referred for gastrectomy or some other surgical procedure. Experience tells us that one cannot be faulted for assuming that this youthful looking 70-year old would have a lesser risk than an old-looking 55 year old patient if both presented for an operation of similar magnitude. But how do we quantitate biological age? Until researchers can come up with a means of assessing biological age, chronological age will have to be the yardstick.

Although age appears to be a major risk factor for surgery, is age per se the sole criterion? It is without a doubt that with increasing age, there is an increased incidence of major diseases. This could perhaps be more important than the mere fact of growing old. In this context, another consideration that has profound influences on the geriatric surgical patient is the concomitant presence of other major diseases like diabetes, hypertension, coronary artery disease, cerebrovascular disease, renal disease or chronic obstructive airways disease. Ngian and Nambiar's paper bears this out as do other workers (1, 5, 6). Seymour and Vaz (1) concludes "Much of the excess morbidity and mortality in the older patient appears to have its roots in coincidental medical problems." Due to the many associated changes of aging, careful assessment is required to help minimize morbidity and mortality. To reduce the impact of pre-existing illnesses in patients undergoing major surgery, therefore, it is of paramount importance that the elderly patient be thoroughly evaluated by the primary physician and all concomitant diseases treated or controlled before subjecting the patient to surgery. It is the unprepared patient who suffers most as can be appreciated by looking at the outcome of elderly patients undergoing emergency surgery. The responsibility lies with the operating surgeon and primary physician to make his patient as fit as possible before submitting him for surgery if emergency surgery is warranted. There should be no excuse for not dealing with concomitant illnesses of patients undergoing elective surgery.

The elderly surgical patient tolerates complications poorly. Anticipation is the order of the day and a high index of suspicion imperative. The managing team must be ever so vigilant in recognising the beginnings of a potential complication and be one step or several steps ahead of the problem. No problem is to be considered too small to be attended to: minor chest infections, electrolyte imbalances, a fever – no matter how slight, acid base abnormalities, etc, must be looked into and dealt with urgently if the patient is to come away from his surgery quite unscathed.

And now, back to the original question as to whether to operate or not to operate on the geriatric patient. This rings of a rhetoric. Mullany et al (7), in analysing their series of 126 patients above the age of 70 years undergoing open heart surgery, draw conclusions from their studies as well as from others (8, 9, 10) that "the ability to improve the quality of life in the elderly population and at the same time make them less dependent upon institutional care" justifies operating on this group of patients.

Louis Pasteur's demonstration that bacteria are the cause of sepsis and Joseph Lister's teachings on aseptic techniques, together with the discovery and refining of anaesthesia, have made surgery safe for the patient. It is up to us today to make the patient safe for surgery.

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