

*For Debate . . .***The general surgeon**

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In the dining rooms of teaching hospitals and in the bars at conferences specialist surgeons may be heard forecasting the imminent demise of the general surgeon and his replacement by specialised multidisciplinary teams who will concentrate on one system, or even part of one system. Though it is undeniable that progress means that such teams will be necessary to treat rare and difficult cases, it must be questioned whether the disappearance of the general surgeon is inevitable or desirable.

In the proceedings of the meeting of the American Association of Program Directors in Surgery this problem in general and its effects on training programmes in particular are discussed.<sup>1</sup> Trunkey from San Francisco forcibly states that unless we return to training a real general surgeon—that is, one who can treat the injured and the “really sick” patient and perform non-cardiac thoracic, general vascular, and guts and glands surgery—then we face the alternative of a committee approach in which the patient will be treated as a set of organs by different specialists. Foster from Farmington suggests that it is necessary to fight further specialisation to preserve general surgery and in the interests of patient safety. Surgeons must now consider the future of surgical practice, for otherwise they may find themselves forced along paths from which there is no retreat.

Highly specialised surgeons may be able to function in a large teaching hospital where there is sufficient referral work to gain experience and maintain their skills. This will not, however, be the case in the hospital in the suburbs or in the district general hospital of a medium sized town. Here it will be expected that a general surgeon will have a particular interest and experience within surgery but desirable also that he is generally capable and able, on his nights on duty, to deal with a wide variety of surgical emergencies. The alternative is to have a range of specialist surgeons on duty each night so that every eventuality may be treated by a specialist in the system that is diseased or damaged. This approach is nonsense, both medically and economically.

It is not only for practical reasons that the maintenance of general surgery is important. General surgery continues to attract candidates of the highest quality, and, today, registrars in general surgery who apply for senior registrar posts often have a higher degree and half a dozen published papers and 10 presentations to learned societies, as well as considerable surgical experience. Twenty five years ago such qualifications would have ensured a consultant post in a teaching hospital.<sup>2</sup>

**Attraction**

What is it about general surgery that stimulates the continued flow of such high quality candidates who are, in general, so much better qualified than applicants for the surgical specialties? I believe

that general surgery is more attractive than the specialties because in most cases it gives the surgeon an opportunity to practise total patient management. The surgeon is responsible for the diagnosis of the problem, the preoperative and postoperative management of a wide variety of conditions, and, of course, the operation. In particular, the decision not to operate remains the surgeon's. All of this is supplemented by the opportunity to practise, with special skill, one aspect of surgery. The whole package makes for a stimulating career.

Is it possible for one surgeon to be competent across such a broad range of conditions? The answer is clearly yes. There is so much mythology surrounding technical ability in surgery that even our physician colleagues sometimes become convinced that technical competence automatically accompanies specialisation. Certainly, in some difficult procedures the best results are obtained by those who repeatedly practice the same operation. Thus in oesophageal surgery outcome is to some extent related to the frequency with which a surgeon operates on this organ. It is, however, the general surgeons with an interest in oesophageal surgery—McEwan, Lewis, Franklin, Ong—rather than the thoracic surgeons who have made their name in this subject. Moreover, studies on disordered physiology of the oesophagus have largely been carried out by general surgeons, the thoracic surgeons tending to maintain a mechanistic outlook on this organ.

Therefore, although a few procedures are best undertaken by surgeons with special interest and experience, in general good results in surgical practice come not from specialisation but from good training in surgical technique combined with an inherent ability to operate. Poor surgeons do not produce good results simply by becoming specialised. Any surgeon who has had a broad training will recall working with specialised surgeons who were not good operators. Fielding and colleagues have clearly shown that in surgery of the colon the incidence of anastomotic dehiscence in a surgeon's practice was independent of the number of anastomoses fashioned.<sup>3</sup>

Undoubtedly, the general surgeon of the future must have a special interest within surgery that will have to take account of changing technology and progress in medicine. Operative endoscopy will certainly increase in scope and may develop to such an extent in urology that ultimately some urologists may not have the necessary experience to undertake traditional abdominal operations. Thus they may call on their general surgeon colleagues to carry out the occasionally required abdominal operation on the urinary tract. Alternatively, would it not be better for most urologists to maintain their surgical skills by continuing to practise general surgery with urology as their special interest?

Trauma will remain a major problem, and in hospitals that deal with a large number of patients it will be necessary to have a surgeon available daily to cope with most of the heterogeneous problems caused by injury. As our orthopaedic colleagues become even more skilful in replacing worn out joints in our aging population could not general surgeons with a special interest in trauma take on the management of fractures along with the other aspects of injury? Equally one might suggest that orthopaedic surgeons with a major interest in trauma maintain their skills in abdominal and thoracic

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surgery to enable them to deal with injuries to the trunk. Allgöwer in Basle, with his philosophy of "bones and bellies," has shown this to be feasible, having been a pioneer of surgery in both specialties over many years. He was a founding father of the AO technique of treating fractures and has also written extensively on abdominal surgery.

### Reduced to absurdity

With the royal colleges committed, and the government nominally committed, to increasing the number of consultants in general surgery the opportunities for widening the special interest side of a general surgeon's activities also increase. Thus in a district general hospital in addition to the obvious special interests of vascular surgery, gastroenterology, and endocrinology, the future general surgeon might look to intensive care, nutritional support, and chemotherapy, bringing surgical thinking and expertise to these. The guidelines for training in intensive care laid down by the interfaculty/collegiate liaison group provide opportunities for trainees from all medical disciplines to gain special experience in intensive care and thereby qualify for appointments as consultants with sessional commitments to intensive care units.

The alternative to the above approach is increasing specialisation, resulting in the absurdity sometimes seen in the United States where a "colon and rectal surgeon," having undertaken his bit of an abdominal operation, will call a "hepatobiliary" surgeon to remove a gall bladder incidentally found to contain stones. In its extreme form specialisation produces what has been called in some parts of the world a "procedural specialist"—namely, a surgeon who specialises in one or two operations. Such surgeons use physicians to undertake all preoperative and postoperative care. Indeed, there are now surgical training programmes in the USA in which the residents are confined to the operating room and play no part in the preoperative or postoperative management of a patient. Surgery reduced to such a level does not require an undergraduate medical education and a prolonged postgraduate programme. Two years in a technical school would probably be sufficient.

Our royal colleges of surgeons, though recognising the importance of specialisation in, for example, vascular surgery, organ transplantation, head and neck surgery, and surgical oncology, have resisted setting up separate specialist advisory committees for these. Indeed, the specialist advisory committees in general surgery and

urology have come to terms with the problems caused by rigid separation of the specialties and have agreed to allow the appointment of general surgeons with a special interest in urology, though still insisting on dual accreditation. To maintain the quality of those who aspire to enter surgery we must ensure that they are given a broad and stimulating career rather than one stifled by the narrow confines of a subspecialty.

Since the days of Hunter surgeons have made contributions outside the technical aspects of their subject. Lister ranks equal to Pasteur in microbiology. The foundations of modern intensive care were laid by F D Moore. Studies of parenteral nutrition, shock, and transplantation immunology have been led by surgeons who were stimulated to look outside the operating room. Many of the changes in attitude to the surgical management of cancer have come from the ability of surgeons to think beyond dissecting out a carcinoma. Such radical thinking is unlikely to come from the constrained mind of a procedural specialist. The breadth of intellectual endeavour that exists among surgeons is evident to anyone who attends a meeting of the Surgical Research Society: the subjects to be discussed at the next meeting range from reticuloendothelial failure in severe sepsis through postoperative fatigue to psychiatric morbidity after mastectomy.

The continued training of general surgeons with or without a special interest is sound economics. Furthermore, it will provide our towns and cities with mature and skilled surgeons who will face a lifetime of intellectually and technically challenging work that will change continually. Opportunities will continue to arise in teaching hospitals and referral centres for those who wish to become highly specialised. Good care will be provided for the vast majority of patients near their homes by the well trained general surgeon. To diverge from this path will mean that the bright young men and women who are vying for posts in general surgery will choose other, probably non-surgical, specialties.

### References

- 1 Anonymous. Marauders on the body of surgery: offense and defence. *Curr Surg* 1984;41:243-53.
- 2 Taylor I, Clyne CAC. Senior registrar applications in general surgery in 1982. *Br Med J* 1985;291:143-4.
- 3 Fielding IP, Stewart-Brown S, Blesovsky L, Kearney G. Anastomotic integrity after operation for large bowel cancer. *Br Med J* 1980;281:411-4.

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*Two young women were given daily doses of cyproterone acetate (2 mg) and ethinyl oestradiol (0.05 mg) for acne. Their acne improved but they started losing hair from the scalp. Is this a usual side effect and what is the mechanism?*

There is no evidence that oestrogens influence hair growth. Progesterones may induce hair to go into the resting phase and then fall out, a process known as telogen effluvium. Cyproterone acetate is a derivative of progesterone with potent antiandrogen properties counteracting the action of testosterone, so that it may help in reducing some types of hirsutes and acne, especially in women with raised concentrations of testosterone. Accordingly, cyproterone acetate as a progesterone derivative might induce telogen effluvium, though there is no evidence for this. There is, however, no evidence that its action as an antiandrogen has any effect on terminal hair, whose growth is not induced by testosterone. This combination of drugs is marketed as Diane and apart from its use in treating hirsutes and resistant acne in young women it is prescribed as a contraceptive pill. Many young women find their scalp hair thins in their late teens and early 20s and no obvious cause is found, but since the introduction of the contraceptive pill some women taking it have tried to blame it for this phenomenon. A study of the records of women with scalp hair fall presenting at St John's Hospital for Diseases of the Skin, in London, showed that the referral rate of such patients was no different after the introduction of the contraceptive pill,<sup>1</sup> and furthermore that the incidence of scalp hair fall was the same in young women taking the pill as in those not taking the pill. There is some evidence that scalp hair fall may occur when the pill is withdrawn but no convincing evidence that scalp hairfall can be attributed to taking it. Accordingly the

scalp hair fall reported by the two women taking this treatment for their acne was probably unrelated to their therapy.—ALAN B SHRANK, consultant dermatologist, Shrewsbury.

- 1 Griffiths WAD. Diffuse hair loss and oral contraceptives. *Br J Dermatol* 1973;88:31-6.

*What are the ethics of a consultant pathologist discussing pathological diagnoses with a patient? Clearly, the consultant pathologist's first duty is to inform the medical practitioner who consulted him for his opinion, but has the pathologist no duty at all to the patient?*

The consultant to whom the patient is referred by the general practitioner should be regarded as being responsible for managing the patient's treatment in hospital. Any registered medical practitioner must accept personal responsibility for an opinion expressed about a patient's condition, and it may well be helpful to the patient for a pathologist to explain the nature of a procedure that forms part of the investigation or to discuss the significance of a particular set of results. Pathologists share many duties to patients with colleagues to whom the patients are directly referred. The pathologist has the same duty of confidentiality in relation to personal health information; the same responsibility to give advice that is in the patient's best interests, free from bias due to external pressures; the same duty to respond to emergencies; and the same overall duty to do good and not harm.—JOHN DAWSON, head of the professional, scientific, and international affairs division of the BMA, London.