

## General Education in Surgery

THE woolliness in thinking that has come to pass about general surgeons and general surgery was set forth on this page some time ago. Even if it is no longer possible to talk sensibly of *general surgery*, it may be feasible to consider the nature and purpose of a *general education* in surgery. This approach is timely because the certifying boards in the surgical specialties have fallen into the trap of prescribing a number of years of so-called general surgery as a curtain raiser to what is held out as the main event. Now, the mere "doing" of a dozen or so appendectomies and a few "gallbladders" is not the general education in surgery which orthopedists, urologists and others need in addition to their specialist studies. Their need is for a general education in surgery which will enable them to see their own activities as but one thread amongst the many which form the fabric of surgical knowledge. They must be made to see that there may be several approaches to the problem of an individual patient.

A general education in surgery should hammer into their heads the rich mine of information provided by a carefully taken and comprehensive history, the virtues of a complete physical examination, and the mastery over an unexpected complication made possible by the laboratory tests that rightly precede an operation of any sort. A general education in surgery will persuade them to keep their knowledge of human anatomy fresh and thus be able to extend with safety the regional operative field when needed; it will encourage them to develop certainty in the recognition of the

morbid anatomy of disease. Future specialists need to learn about anesthetic agents and sedatives, blood loss and hemostasis, the origins of incisional infection, the processes of regeneration and cicatrization, and common disturbances of water, chemical and nutritional balance. They must be made aware of the history of their calling so that they gain a feeling for the romance of surgery and also for its tragedy. They need to trace the way of the path along which the craft has emerged from the darkness and superstition of the past into the light of more rational procedure. Only by this backward glance will they be convinced that there can be no retreat. They will grow in stature by an acquaintance with the names and lives of the leaders who have shown the way and forged the tools which are dedicated not to the self-aggrandizement of those who wield them, but to the well-being of mankind. Above all, specialists must be brought to see that surgery is but an activity of medicine, and that when its action is directed in a wise and humane fashion, how greatly the happiness of man can be served, but that if directed unwisely or thoughtlessly, how quickly a human life can be wrecked.

No one in his right mind would wish to relinquish the benefits of the expert technical skills that are the products of concentrated specialist training, but only a general education in surgery can safeguard and direct the use of these skills. It thus becomes an essential part of all specialist education.

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