ATTRACTION THE UNDERGRADUATE

BY

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A FEW years ago, one of the first duties that might be required of a newly qualified practitioner was the administration of general anaesthetics. Today, it is more than likely that his successor may give the only anaesthetics of his career as a medical student under supervision. The National Health Service has virtually banished the occasional anaesthetist and the general practitioner who always gave anaesthetics to his own patients for surgical procedures. The opportunities for the general practitioner to practise anaesthesia are now limited almost entirely to the dental "gas" or to the field of obstetrics. This is a paradoxical situation since it is recognized that both are potentially hazardous and present difficulties even to the most highly skilled. This is not a criticism of the general practitioner but rather of the circumstances which place him in such an invidious position.

This, then, is the situation. Hospitals are now staffed with full-time anaesthetists (in varying stages of training it is agreed), and allow no opportunities for the nonanaesthetic house officer; while to the general practitioner, bereft of all anaesthetic experience, is left one of the most difficult and dangerous of all tasks. This is the background against which the medical student receives his training in anaesthetics.

It would seem that before discussing the ways by which recruits may be attracted to anaesthesia, it is necessary to decide what the student must be taught about anaesthetics. Also, and equally important, when the medical curriculum is already so full, what object there is in view in teaching him the subject at all. No clear answer can be given to either, but the time has surely come to review the position and possibly revise our plans for the future. Before attempting to find solutions to these problems, our own minds should be clear on a number of points:

1. Should anaesthetics be given only by qualified anaesthetists? In answering this the matter must be brought down to a personal level and we must consider whether we are willing to allow our families or ourselves to be anaesthetized by a nonspecialist.

2. Is it advisable to give every house officer opportunities (if there is time) to gain experience in anaesthesia?

3. Is it reasonable to expect the general practitioner to administer anaesthetics for childbirth only—is it fair to the mother or the doctor?

If we accept the fact that all qualified practitioners should be capable of administering an anaesthetic, it is not easy to know what anaesthetic techniques they should be taught. Above all, these techniques must be safe and must be applicable on a variety of occasions including domiciliary obstetrics. There is a moral, and unhappily there may be a legal issue at stake. But even if these two interests are identical, it is more than likely that the local and not the ideal circumstances will provide the answer.

One solution lies in the expansion of our anaesthetic services, so that there will never be either the excuse or the need for anyone other than a specialist to give an anaesthetic in any form of practice. If this is the solution, then many recruits are needed, and these should be the pick of the students and not the "cast-offs" from every other branch of medicine. If quality is sacrificed for quantity, the specialty will fall into disrepute and the status of which we are so proud will be no better than in those countries where the anaesthetic specialist is unknown. But everybody wants the

* The opinions expressed in this article are those of the author only and do not necessarily represent the views of the Nuffield Department of Anaesthetics.
frequent contacts of ward rounds and clinics which provide the common meeting ground for other members of the hospital staff. In other words, opportunities must be made for students and anaesthetists to get to know each other and, it may be hoped, to develop a mutual respect.

If these efforts are successful, yet another problem remains: how to maintain and foster this interest for possibly two more years before the recruit is ready to join a Department of Anaesthetics. Somehow, the activities of the department must be brought to his notice. Open invitations to attend meetings are obvious, but are unlikely to attract much attention—the student knows all too well that most of the discussions will be too technical and far above his head. A possible alternative lies in the establishment, with the approval and support of the medical school, of monthly or even quarterly seminars. These should be given by members of the Anaesthetic Department, but designed for a nonanaesthetic audience. The subject matter must, therefore, be of general interest but with a strong anaesthetic flavour.

If these suggestions are put into effect, it is well to realize that they entail much hard work by the anaesthetists. Care and forethought must go into every lecture and demonstration so that the final result becomes a polished performance. A slapdash approach will be calamitous and do more harm than good. The intention throughout must be to present anaesthesia as a specialty worthy of being adopted as a career. For those who have other loyalties, this programme will at least give them an opportunity to appreciate the problems of anaesthesia and enable them to explain to patients what may be expected at an impending operation. For this last reason alone, it is obvious that instruction in anaesthesia is an essential part of the medical curriculum. But with the high standards of safety demanded today, it is not possible to train a practising anaesthetist in two short weeks. Such a concept must be forgotten and it must be realized that the man who is going to administer anaesthetics, under any circumstances, should have postgraduate training.

A system designed to attract the undergraduate must rely finally on the anaesthetists themselves, the example they set in their work, the interest they show in student teaching, and the help they are prepared to give in developing the ever widening field of anaesthesia. The fact that advertisements have an unselective appeal must be accepted, but the high standards of the F.F.A. can be relied on to select the best with impartial, if not loving, care.

correspondence (continued from page 283)
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It is a tribute to the demands made on the space of your monthly Journal that our article and the comments on it are separated by the space of six months. I would be sorry, however, if after this interval the reader did not have the original article to hand to judge whether the wording of one of the comments is justified. Sturtzbecher did not describe an endobronchial tube. His blocker was the first to be attached to an endotracheal tube, and it was for this reason that we inserted his name (in brackets) immediately after the heading "Endobronchial blocker". We also added the names of Müelly and Hossli because they gave an excellent description and diagrams of Sturtzbecher's blocker. And at the end of our article these authors constitute two of the three references.

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best. If we are to have it, then strenuous efforts must be made to make the specialty more attractive as early as possible in the student’s course of training. The undergraduate must be caught before he can be seduced by the more glamorous enticements of other specialist branches.

Under the scheme of teaching at most centres, this is not possible, for instruction in anaesthetics is usually encountered shortly before qualification. By that time, the student has been subjected to the influences of almost every other department and his future interests are almost decided—at least for the time being. The arguments advanced in favour of this course of events claim that an essentially practical subject, for which so little time is available, is likely to remain fresh in the mind and therefore ready for instant application if it is taught as nearly as possible to the time when it is to be used. With the preregistration year ahead, this is no longer true.

During the last few years, students at Oxford have received their courses in anaesthetics soon after entering hospital during their first surgical term. This procedure was adopted with reluctance in order to fit in with an amended curriculum. To our surprise, the results of this change have been most gratifying and two points have emerged:

1. The students appear to take a greater and more intelligent interest in the lectures, presumably because they are not yet saturated with medical facts.

2. They have shown an increased keenness during their course of practical instruction. This has been shown by much spare time spent in waiting and hoping for emergency patients, and by the total number of anaesthetics administered. In many instances, this has amounted to almost double the number performed under the former régime.

It is suggested that these results confirm the opinion that an early approach to the student is well worth while. Without in any way altering the syllabus or opportunities except in the time relationship to the rest of the clinical course, anaesthesia is arousing more interest. This is probably because the administration of anaesthetics now offers one of the earliest occasions for doing some “practical doctoring” and accepting some small measure of responsibility. At this early and impressionable stage in his career, the student has not had time to become blasé and is grateful for any clinical crumbs that may be thrown to him. Two weeks of activity devoted to giving anaesthetics is a very large crumb, and although this period will have little influence on his future ability as an anaesthetist, it may whet his appetite for further knowledge. At least, it gives us an opportunity to present a few aspects of our specialty to a receptive mind.

It is too early to claim that the early presentation of anaesthetics to the students will provide, ipso facto, a constant stream of would-be anaesthetists, but already several have expressed an interest in adopting anaesthesia as a career. This in itself is an advance, and most welcome after a series of sterile courses when the members’ one aim in life has been to get “signed up” as painlessly as possible and have done with yet another infliction deemed necessary by the authorities. But if an early approach to the student has any virtue, why wait until the clinical years? During the pharmacology course drugs used by the anaesthetist are considered alongside aperients, antibiotics and anthelmintics, and capital can be made out of this fact. Such an idea is not original, for the opportunity has been already recognized by many medical schools in the United States where the manpower shortage in anaesthesia is far worse than in the United Kingdom. In Cleveland, Ohio, at Western Reserve University, sixteen hours of pharmacology lectures are now devoted to anaesthesia, and are undertaken by members of the Department of Anaesthetics. This is in no sense a criticism of the ability of the pharmacologists, but may be regarded as a veritable monument of cooperation and goodwill between two departments. In this course, more time is devoted to demonstrations than to lectures, and with the emphasis on the practical application of anaesthetic drugs rather than their pharmacological properties. It is for this reason that the anaesthetist takes over from the pharmacologist. The result may not be an epitome of didactic teaching, but it demonstrates very vividly the potentialities, and not infrequently, the unrehearsed dangers of anaesthesia.

The purist would undoubtedly describe the performance of spinal and caudal blocks on dogs, and
rabbits subjected to open ether to show the stages of anaesthesia, and of cats brought to cardiac arrest with chloroform, as mere window dressing. So indeed it is, and achieved only at the expense of much time on the part of the anaesthetists.

But the results have justified the experiment, and at this particular school, it is the surgeons who now have a shortage of recruits owing to the transferred loyalties of several prospective residents. This is demonstrated in another and more positive light. Yet most physiology courses never mention the word anaesthesia, although the importance of an efficient respiratory exchange, with all that this entails, is well recognized by every candidate for the D.A. and F.F.A. The establishment of respiratory units up and down the country has stressed the necessity for a proper understanding of the treatment of respiratory failure, and these units could serve as ideal examples for the practical application of what are all too often academic facts. Also, but by no means less important, this linkage could show that the scope of anaesthesia is extending beyond the confines of the operating theatre. An early introduction, and active participation in the administration of anaesthetics as soon as possible, should therefore be the two major aims in any programme designed to attract the undergraduate.

Next, a departure from the usual reserved attitude of many senior anaesthetists towards students' activities is desirable. This may be regarded as a poor substitute for the regular and
frequent contacts of ward rounds and clinics which provide the common meeting ground for other members of the hospital staff. In other words, opportunities must be made for students and anaesthetists to get to know each other and, it may be hoped, to develop a mutual respect.

If these efforts are successful, yet another problem remains: how to maintain and foster this interest for possibly two more years before the recruit is ready to join a Department of Anaesthetics. Somehow, the activities of the department must be brought to his notice. Open invitations to attend meetings are obvious, but are unlikely to attract much attention—the student knows all too well that most of the discussions will be too technical and far above his head. A possible alternative lies in the establishment, with the approval and support of the medical school, of monthly or even quarterly seminars. These should be given by members of the Anaesthetic Department, but designed for a nonanaesthetic audience. The subject matter must, therefore, be of general interest but with a strong anaesthetic flavour.

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