First Scudder Oration

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Trauma, Specialism and The College

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A REVIEW of the names of previous orators on trauma reveals that all have been men of conviction, courage and accomplishment. All have had a great interest in the field of trauma, be it localized to the skeletal system or to other parts of the body. Twenty-six of them would, I believe, care to be referred to as general surgeons, whereas five must be designated as pure—if I may use the word pure—orthopedic surgeons. Until about 1950 their subjects dealt largely with techniques of fracture treatment. During the past decade, however, there has been a tendency to discuss the general management of trauma in all forms, and the multiple injury patient has received an increasing, well deserved amount of attention. A few addresses have been along philosophical lines, largely about the training of the surgeon who is to care for the wounded; and recent orators not only have pleaded for broad training of the trauma surgeon, but also expressed the hope that such a surgeon would be able to manage injuries to the skeletal system as well as wounds of the head, chest, abdomen and other parts.

I have listened to these latest orations with great interest, and I am in entire agreement that many surgeons directing the care of the injured are not adequately trained or experienced. Since this particular subject is still a controversial one and is on the minds of those who train undergraduate as well as postgraduate students, it was not difficult for me to decide in which direction I should slant my remarks in this discussion, for I have a strong interest in the relationship between the surgical specialist and the general surgeon, and a particular interest in the surgical specialist and his activities in the American College of Surgeons.

This College is the one forum where all branches of American surgery meet, and it may well be the most important surgical organization in the world. Of more than 21,000 active members of the College in the United States, territories under United States administration, and Canada, approximately 11,000 are general surgeons and about 10,000 are specialist surgeons—almost an equal division. However, of the 35,000 board-certified surgeons in the United States, 11,000 are general surgeons but 24,000 belong to specialty groups. Of all general surgeons, so listed, 56 per cent are board-certified. Of nine specialty groups, 87 per cent of the surgeons have passed their board examinations. These figures, I think, are of interest and perhaps of some significance as we look to the future.

If there is one part of surgery in which all surgeons, be they specialists or general surgeons, have a common interest, it must be in the field of trauma: for trauma cuts across all lines, is the third commonest cause of death in all ages, and is the commonest cause of death below the age of 36 years.

Surgery began with trauma and has continued in an increasing amount decade after decade, century after century. Only in the type of trauma has the situation varied. Prehistoric surgery dealt with treatment of the soft tissue wound and trephination of the skull for the treatment of injury. Fractures were splinted by the early Egyptians. Albucasis, in the tenth century, described two types of operations for trauma: those which benefit the patient, and those which usually kill the patient.

War has always been a great teacher in the surgery of trauma; and gunpowder, the oldest of explosives, used by the ancient Chinese and introduced in 1242 to the western world by Roger Bacon, of Oxford, drew surgery into the Renaissance movement later in the sixteenth century. Ambroïse Paré, the greatest surgeon of the Renaissance, was an army surgeon and attended succes-

sively four French kings. The leading surgeons of the fifteenth and sixteenth centuries, as well as of other periods, were military surgeons, but until the twentieth century and the two world wars, more particularly World War II, mortality and morbidity from wounds remained appalling.

Although anesthesia had been available since 1846 and the diagnoses, of skeletal injuries especially, had been enhanced by Röntgen's discovery in 1895, the over-all management of trauma did not advance particularly until this century. For these great improvements there is no one answer, but specialization in surgery must be given a share of credit for some of the advances in the care of the wounded. The surgical services of military hospitals, organized in various divisions, represented a tremendous advance over those in operation in previous wars. The affiliated Army and Navy units called into service much of the best talent from our medical schools. The opportunity for research in trauma was never better for the young military surgeon. All of us owe much to our war experience in the surgery of trauma. Thus war has provided the surgeon with excellent postgraduate training and experience, but where and how is this training provided in peacetime?

Postgraduate Education Is Increasing

Interest in postgraduate education, particularly in trauma, well on its way to being more and more a part of our obligation as teachers, has developed and increased, although not enough since 1945. Witness the continuing postgraduate educational programs at the Universities of Minnesota and Pennsylvania, as well as the several postgraduate courses* in the management of fractures and other traumas which have been developed in Chicago, Boston, New York, New Orleans, San Francisco, Los Angeles and other medical centers. Even so, it is believed by some that postgraduate education is lagging well behind undergraduate medical education in our country. This is easily understood because postgraduate training is more difficult to control. For example, at present the commonest cause for nonunion of bone after fracture is poor surgery; and failure on the part of the physician to diagnose early congenital dislocation of the hip makes treatment of that condition difficult and sometimes impossible when the child is older. These are only two instances where something is wrong with our postgraduate teaching.

But It Still Isn't Good Enough

Russell Nelson, of the Johns Hopkins Hospital, states that while our undergraduate education in medical schools is the best in the world, postgraduate medical education at present is comparable to that which existed in undergraduate training prior to the Flexner report in 1910. Nelson would provide in the large medical centers continuing educational instruction from which the practitioner in the smaller communities could benefit.

The American College of Surgeons, the American Academies of Ophthalmology and Orthopaedic Surgery, and other similar groups have made progress since 1940 in postgraduate education, by

*Editor's Note: For examples see pages 65 and 66.

The "*Scudder*" Oration on Trauma was initiated on October 29, 1963 at the Clinical Congress in San Francisco by Edwin French Cave. Of Charles Locke Scudder (1860–1949) whose contribution as a Fellow to the American College of Surgeons, which he supported as a Founder, and as the founder and first chairman of its Committee on Trauma, the former "Oration on Trauma" now commemorates, Dr. Cave says: "It is fitting that this lecture honors Charles Scudder, who had the vision to see the needs of the injured patient in the years to come.

"I remember him well as a consulting surgeon at the Massachusetts General Hospital during the 1920's," Dr. Cave continues. "At that time Dr. Scudder had retired from active surgery, and, although I never saw him operate, he had been regarded as a meticulous, almost fussy surgeon who did, among other things, a great deal of conservative gastric surgery, chiefly gastroenterostomies, for which he always wore white cotton gloves. He was not a bold surgeon as we generally know one; most of his gastric patients therefore survived, as opposed to many who had the more radical resections by some other surgeons of that era, whose mortality unfortunately was high. In 1917 Dr. Scudder organized, and was the first chief of, the Fracture Service of the M.G.H., the first such clinic in the United States; and in 1922 he called a meeting in Boston for the formation of the Committee on Fractures, now known as the Committee on Trauma. Finally, Dr. Scudder's textbook on fractures, first published in 1900, was the classic of the day. It went through 11 editions, the last being published in 1938."

Dr. Cave is now consulting visiting orthopedic surgeon at the M.G.H.; was the fifth to succeed Dr. Scudder as director of its fracture clinic; and the thirty-first to give the oration first given in 1929 by the surgeon whose distinguished name it now bears.

the instructional courses which are given at their annual meetings. In addition, the annual Forum on Fundamental Surgical Problems at the Clinical Congress fulfills a great need for all branches of surgery by providing for the younger surgeon a platform where he can briefly report experimental work or other studies which he has undertaken. While the audience benefits, the author is rewarded tenfold.

This accomplishment has both advantages and drawbacks, for the young specialist surgeon who comes to a large meeting, such as the annual Congress, tends more and more to attend only the conference which deals directly with his subject. This has the disadvantage of making his point of view narrower and narrower. It is happening not only at our large meetings but also in our hospitals where, because of specialization, the surgical specialist becomes more and more isolated in his own category.

Confer With Other Surgical Specialists

I see this situation in my hospital; you see it in yours. How often do you as general surgeons sit down with the plastic, orthopedic or urologic surgeons? How often do we as specialists attend general surgical conferences? Not often. Certainly not often enough. Perhaps the general surgeon may think that if he starts treating the specialist as an equal, the specialist will soon begin to behave like one, as indeed he is. I cringe when I hear a colleague in my own specialty refer to himself as a "second-class surgical citizen"; or when a surgical acquaintance refers to the surgical specialty as "the refuge of mediocrity." These statements are not in conformity with the facts.

Specialization is a part of American life and has developed as definitely and as extensively in medicine as in any other field of endeavor, but we must be constantly upon the alert to prevent the specialist from becoming too content in his own field and too prejudiced. Phyllis McGinley puts it as follows:

> We might as well give up the fiction
> That we can argue any view
> For what in me is pure conviction
> Is simple prejudice in you.

Harvey Cushing, a specialist surgeon if there ever was one, remarked before the International Congress of Medicine in London as long ago as 1913 that the specialist groups should never wander too far from general surgery, and Howard Naffziger, who played such a prominent role in American surgery, believed that specialization is essential, but that to be useful as a teacher the specialist surgeon must be able to investigate his work in the entire field of surgery.

What about the specialized hospital? It seems apparent that the specialized hospital, tried in both peace and war, has not lived up to expectations. The establishment in other countries of separate accident hospitals controlled and financed by the state or by insurance companies is admirable and may be reasonable for them, but I do not believe practical for America. All such accident units should, I think, be connected with a general hospital insofar as possible. Here all type so fsurgeons and physicians can be available when needed. Staffing of the specialized hospital, even in Europe, has become more and more difficult, since such units are too small and the work too sporadic to attract a well qualified staff which would be consistently in attendance.

Sir Harry Platt, speaking before the Royal College of Surgeons in April, 1961, expressed the desire that the major central accident unit be at a general hospital, or within a general hospital group. He remarked further that three types of surgical experts are needed: the orthopedic surgeon; the neurosurgeon; and the plastic surgeon. "I put the orthopaedic surgeon first," says Sir Harry, "because 75 per cent of the injuries will involve the structures of the locomotor system . . . It is known that other categories of injury are likely to be small in numbers. For them, behind the primary team stand the general surgeons, the thoracic surgeons, and the dental consultants." We must remember, of course, that Sir Harry is an orthopedic surgeon!

At the Massachusetts General Hospital in a series of 800 house admissions necessitated by trauma, the number of multiple injury patients in whom the major trauma was to soft tissue represented seven per cent; those with head injuries, four per cent; maxillofacial injuries, a surprising 12 per cent. The remaining 77 per cent were straightforward fracture cases. These percentages are consistent with figures reported by John Stewart in 1959 and similar to those of James Scott, of Oxford, in 1962.

Who Directs Accident Service?

And who should be the director of the accident service connected with the general hospital? I do not believe it matters whether the specialist surgeon or the general surgeon directs the accident service if the chosen director has the following qualifications: first, strength of character and all

that goes with it; second, administrative ability; third, broad surgical training with particular emphasis upon the care of the injured patient and more especially upon the care of the commonest types of injuries—those to the skeletal structures; and fourth, fair mindedness and a willingness to co-operate with other staff members.

In 1959 the College published* the following statement: "The Board of Regents believes that it is of the greatest importance to American surgery that those in positions of responsibility for general surgical training make available in their programs for qualified candidates two or more years of general surgical training for those going later into the surgical specialties." How accurately has this expressed desire been fulfilled? It should be emphasized that this was a desire on the part of the College, not a mandate.

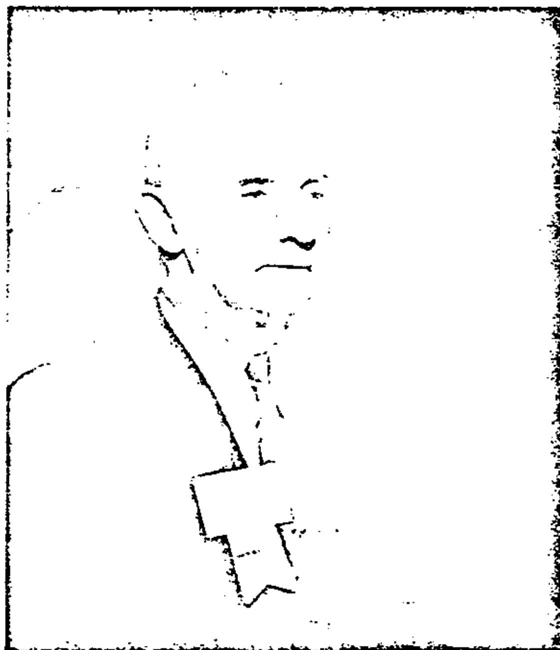
Basic Surgical Training for Specialists

How enthusiastic is the average director of a general surgical service in providing for such basic surgical training for the specialists?

Furthermore, do the majority of specialist surgeons wish to have their prospective trainees exposed to this amount of basic surgical training?

These are most difficult problems to solve, but it is gratifying to know that the College's Committee on Graduate Training is attempting to find the answers by discussions with representatives of the various surgical specialty boards. These discussions must be conducted in a spirit of understanding and humility, by mature men who desire not only to improve their own specialty but to advance American surgery in general. Trying to establish programs that apply to all specialties calls for a great deal of flexibility, and discussions along these lines must be carried out between equals and not with the feeling that one group is trying to dictate to another.

*Bulletin, March · April 1960, page 88.



I believe that the large majority of my own specialty desire that a thorough general surgical training be obtained before the candidate specializes. The number of years required must be determined. On the other hand, the gynecologists state that they can provide basic training within their own programs, and ophthalmology requires no surgical experience before the candidate becomes a trainee in surgery on the eye. It is doubtful, however, that any specialty group has a sufficient number of men adequately trained so that they can instruct the younger surgeons in the broad basic surgical principles and in the knowledge of total preoperative and postoperative care that go with any form of surgery, whether it be general or a specialized branch. Such training must be provided by the general surgeons. The specialists should accept it and be grateful for it. Perhaps the specialist would be more understanding if he had a greater voice in arranging medical school curricula and in directing the surgical services of our hospitals.

Save Time in College

The directors of specialty training programs are clamoring for more and more time for training of the specialist surgeon. This calls for economy in time. It seems hopeless to economize in residency training. Time can be saved, however, in college and graduate schools. The luxury of a broad education in the liberal arts for the future medical student may have to be curtailed. Perhaps the surgeon of today cannot equal the well educated man, who is said to know everything about one thing and something about everything.

At the same time there is too much wringing of hands about the alleged diminishing quality of medical students in the United States today. It is

Edwin French Cave *makes the Scudder* (page 62) *Oration on Trauma. Pendant from orator's badge is the red ribbon signifying that the wearer is a member of the College's Board of Governors, on which Dr. Cave represents the American Association for the Surgery of Trauma.*

true that the quantity is not adequate, for 100 years ago 28 per cent of all college graduates entered medicine; 50 years ago, 10 per cent; and now only two per cent.* This, of course, is a result of the greatly increased number of college graduates and competition from other fields of science.

The medical college admission test indicates a steady rise in the quality of students for the last decade. The gloomy prophets who sadly state that the quality of students is declining should realize that an "A" from many colleges indicates less ability than a "C" from one of the stronger institutions.

These same pessimists talk about the "tarnished image" of the doctor. One of the most understanding and understandable addresses that I have read recently was that of Edward Churchill,† in the Lahey Lecture of 1962, in which he deplores the current practice of the lay press in continuously finding fault with the doctor and with the medical profession in general. Churchill also regrets that too often presidential addresses take on the pattern of a tirade against the old perennial evils of fee-splitting, unnecessary surgery and incompetent medical practice. As he says, "Such pronouncements are seized upon by journalists and others who deal with medicine more and more at second hand. I am both annoyed and indignant when I hear glib lay panels assembled to discuss the so-called 'tarnished image' of the doctor . . . I am proud of being a doctor—I am proud of being a surgeon."

I would add that I am proud to be a member of the American College of Surgeons and its Committee on Trauma, and I am proud to be an orthopedic surgeon.

LET US WORK TOGETHER

The intriguing mysteries of surgery make us fair game for the present-day lay journalists. With all of the criticism and faultfinding by some of the laity concerning our profession, let us remember that we as surgeons cannot correct these inequities if we are divided among ourselves; further, that no matter what is said about us we have the primary duty of advancing American surgery to the best of our ability; and finally that our first obligation is patient care, with teaching and research following in that order. Let us also remember that we can attain these objectives more effectively by cooperation with one another and by more understanding among the individual surgical groups. Although rivalries are healthy, isolation of the various specialties is to be deplored. The specialist and the generalist in surgery must work more and more closely together in providing training in their societies, in their hospitals and as individuals. The American College of Surgeons, particularly the Trauma Committee, offers this opportunity.

Let us have more integration of our well established divisions of surgery. Let not the specialist and the general surgeon wall themselves off from one another, for, in the words of Robert Frost,

> Something there is that doesn't love a wall,
> Before I built a wall I'd ask to know
> What I was walling in or walling out,
> 'Men work together,' I told him from the heart,
> 'Whether they work together or apart.'

*CULVER, P. J. Medical Care: Its Social and Organizational Aspects. N. England J. M., 1963 (July 11) 269: 78.

†CHURCHILL, EDWARD D. Should I Study Medicine? N. England J. M., 1963 (March 7) 268: 537.

British and Canadian Surgeons to Participate in Four-Day Course

HOW TO ACHIEVE CERTAIN SUCCESS with ununited fractures will be one of the several subjects on which Sir Reginald Watson-Jones will lecture when he comes from England to take part in the Chicago Committee on Trauma's postgraduate course on fractures and other trauma, April 22 through 25. Well known surgeons from Canada and the United States will join the Londoner in the Chicagoans' eighth annual four-day session in the John B. Murphy Memorial Auditorium at 50 East Erie Street.

The fee is $75.00 for all but residents and interns. They are admitted free upon presentation of a letter from their chief of service.

Anyone who has not already enrolled may either communicate direct at once with John J. Fahey, M.D., F.A.C.S., 1791 West Howard Street, Chicago, Illinois 60626; or register on opening day.

The American Academy of General Practice gives 31 and one-half hours of Category II credit to members who take the course, which is designed for general physicians, surgeons and specialists.

Intersticed with time for talk, coffee and luncheon, the program will begin at 9:30 a.m., Wednesday, April 22 when Dr. George F. Pennal, of Toronto, speaking on fractures of the pelvis makes the first of his several presentations. Other first-morning speakers and subjects are Dr. Robert E. Carroll, New York, 1) levels of amputation in the hand, and 2) fundamental principles in injured

hand care; Sir Reginald, pitfalls in radiographic examination.

The first afternoon will begin when Sir Reginald discusses "repair of fractures—safe conservation or dangerous operation?"; and continue with discussions of dislocations and ligamentous injuries of the knee, by Dr. John C. Kennedy, London, Ontario; fractures of the tibial condyle, Dr. Pennal; and conclude with management of acute and chronic injuries of the knee, Drs. Pennal, Kennedy, James K. Stack, Chicago, Robert B. Salter, Toronto, and Theodore A. Fox, Chicago.

Dr. Salter will lead off on the second day with injuries involving the epiphyseal cartilage plate, and in mid-morning, supracondylar fractures in children. Other presentations are operative treatment of fractures, Sir Reginald; shock, Dr. Robert J. Baker, Chicago; acute head injuries, Dr. Eric Oldberg, Chicago; treatment of fractures of the head of the radius, Dr. James J. Callahan, Chicago.

The second afternoon will begin when Dr. Harold A. Sofield, Oak Park, discusses unusual fractures in children. Sir Reginald will describe how to achieve certain success with ununited fractures; Dr. Rolla D. Campbell, Jr., New York, luxations and dislocations of the carpal bones; Dr. Paul H. Holinger, Chicago, respiratory obstruction in trauma; and Dr. Robert D. Ray, Chicago, fracture healing.

Friday's presentations will begin at 8:30 with a panel on abdominal injuries, with R. Kennedy Gilchrist, Chicago, as moderator. Drs. Charles B. Puestow, Manuel E. Lichtenstein, John L. Keeley, and Orvar Swenson, all of Chicago, are named as participants.

Other subjects and lecturers will be difficult intertrochanteric and subtrochanteric fractures, Dr. Campbell; dislocations and recurrent dislocations of the shoulder, Sir Reginald; trauma to the genitourinary tract, Dr. James H. McDonald, Chicago; early fitting and training of juveniles with traumatic amputations, Dr. Claude N. Lambert, Chicago.

Friday afternoon, Chicagoans and their subjects are Drs. Robert J. Freeark, anerobic infections resulting from trauma; Clinton L. Compere, femoral osteotomy in relation to trauma; John L. Bell, nerve injuries of the hand; and Carlo S. Scuderi, basic principles of fractures of the tibial shaft treatment. How he treats fractures of the femur will be related by Sir Reginald.

Chicago Drs. Theodore R. Hudson, Donald S. Miller, Sumner L. Koch, and Ormand C. Julian on Saturday morning will lecture, respectively, on 1) acute chest injury management, 2) neurovascular complications seen in injuries, 3) management of tendon injuries of the hand, and 4) management of arterial injuries. Sir Reginald is scheduled for two appearances: one on unusual and difficult problems in treatment of fractures and dislocations, the other on rehabilitation.

Californians to Give Trauma Course June 29 to July 1 in Los Angeles

The University of Southern California School of Medicine Postgraduate Division will present a course on fractures and trauma from June 29 through July 1 in Los Angeles.

Guest faculty will include Dr. Preston A. Wade, New York; Dr. Edwin F. Cave, Boston (page 61); and Dr. Francis J. Cox, San Francisco.

Inquiries are to be addressed to the University of Southern California School of Medicine, Postgraduate Division, 2025 Zonal Avenue, Los Angeles, California 90033.

Sir Reginald Watson-Jones, *participant in Chicagoans' course outlined on pages 65 and 66, is seen here as he gave the 1951 Oration on Trauma.*