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Surgical Philosophy Old and New

Address of the President

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Before proceeding with the formal portion of my remarks I want to take this opportunity to thank the Fellows of the American College of Surgeons for the great honor they have extended me in electing me to the highest office in this organization. I have had the pleasure of working in various activities of the College for many years past, and hope I may have the privilege of continuing in one capacity or another for years to come, because I believe so firmly in the worthiness of the College activities, and enjoy working with friends of such high caliber and splendid ideals.

All of us agree that great strides have been made in surgery during the past four or five decades. Most of them are related to scientific advancements; surprisingly few are related to surgical technique itself. The best example of progress in surgical technique is the development of cardiovascular surgery, made possible only after scientific progress in anesthesia, and a more accurate understanding of blood replacement.

MORTALITY RATES 50 YEARS AGO AND NOW

As an example of improvements unrelated to technique let me remind you that 35 years ago the mortality rate for subtotal gastrectomy for benign and malignant lesions combined in a consecutive series was 25 to 30 per cent in the hands of the best surgeons, whereas today it is 3 to 5 per cent or lower in innumerable clinics throughout the country. The type of operation has not changed significantly, insofar as the anterior or posterior Polya procedure was the most popular then, as it is now. Suture material was the same then as now, except for the introduction of the atraumatic needle. I would seriously question whether the technique of Lord Moynihan, Will Mayo, John Deaver and a host of other surgeons at that time was the slightest bit inferior to that possessed by the vast number of good surgeons having a mortality rate of 3 to 5 per cent at the present time. What then is the explanation of this sharp reduction to 20 to 25 per cent of the original figure? The answer is very simple: We have learned to appreciate

some of the ordinary features of surgical physiology, namely, that we must not do major operations on patients with dehydration, electrolyte deficiency, anemia and malnutrition until corrective measures have been utilized. Years ago patients with carcinoma of the stomach were sent to the operating room without any preoperative preparation except for administration of a generous amount of a saline purge which unfortunately added to the patients' dehydration, electrolyte imbalance and malnutrition.

Unfortunately we can still profit more than we have from the lesson just mentioned, insofar as we should inquire from every patient about to have a major operation (particularly one involving the intestinal tract), how much weight he has lost during the few weeks previous to the contemplated operation, and what his food intake has been. It is not sufficient to know that the patient has been eating three meals a day; we must know whether they are full meals, only half, or even less. A few days' therapy with high caloric intake supplemented perhaps with intravenous fluids including blood will help tremendously, because the depleted human body undoubtedly knows where to put the protein molecules where they will do the most good.

METHODS OF

Comparison of methods of teaching surgery a few decades ago and at the present time reveals a rather sharp contrast, and obviously for the better. Without going into details let me remind you that three or four decades ago teaching of surgery was carried out primarily by the apprenticeship method, whereas at the present time the major teaching program is carried out in the hospital in a residency. We have learned comparatively recently that a year in research is of tremendous advantage to the surgeon in his practice. It teaches the young surgeon a lot of fundamental facts about physiology and numerous other basic sciences; likewise, it encourages him to apply scientific methods in solving clinical problems, and should also instill a scientific curiosity of a lasting type in the mind and soul of the surgeon.

During the past several years the American Col-

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lege of Surgeons has capitalized on this new phase of surgical teaching by establishing its Forum on Fundamental Surgical Problems at which surgeons from throughout the country present the results of their research. These papers are limited to ten minutes and accordingly may include only the important data, without punishing the audience with a lot of unimportant details. It is very significant that when these programs were first instituted about ten years ago, the audience was small and many of us in the College who were sponsoring the plan were a bit discouraged. However, the programs were continued annually, and it is gratifying indeed to realize that at the present time a good audience is always assured. In fact, in 1954 when the Forum Committee scheduled a summary of the new research contributions, the room was filled to overflowing with over 1,000 surgeons. . . . In my opinion this is one of the healthiest signs we could hope for in assaying the present and future values of American surgery. Unquestionably, we can now say that American surgery has reached a truly high standard. We need not rely only upon our own opinions in this respect, because while five or six decades ago our young surgeons were traveling overseas to study in the European surgical clinics, today the traffic has reversed itself, and our surgical teaching centers have many, many requests for training from our young surgical friends overseas. Accordingly, perhaps we may be pardoned if we make the humble claim that our system of training is perhaps the best existing anywhere today.

FACTORS THREATENING STANDARD OF TRAINING AND ABILITY

In spite of the fact that our standard of surgical training is high, yielding an excellent product, we must be alert and constantly aware of the possibility of a serious retrogression, particularly since history tells us changes in standards and achievements are the rule, and not the exception. Numerous factors are already existent which might threaten the excellent status of the surgeon and physician as well. One glance at the numerous laboratory aids and the countless number of antibiotics which are so often effective in relieving aches and pains associated with fever, should warn us of the danger of disintegration of our cerebration processes. The tremendously favorable im-

petus of the American Board of Surgery on the standard of surgical ability serves well to assure a certain degree of proficiency, but by no means guarantees that the diplomate will maintain a progressive spirit and improve from day to day after he has achieved his certification.

LACK OF PROGRESS IN CERTAIN FIELDS

Lest we become too self-satisfied about our surgical proficiency let me remind you of one of our serious deficiencies, namely, the low standards existing in the surgery of trauma at the present time. In case you do not fully appreciate the seriousness of this deficiency let me ask you this question. Suppose you, or a member of your family had a serious accident out in the country too far away, or with injury too severe, to allow transportation to a medical center. Would you be concerned about the standard of treatment you would receive? By this statement I am not identifying any particular group of physicians as being incapable of caring for the injured person because far too many qualified general surgeons themselves have inadequate knowledge of the diagnostic and therapeutic features of trauma even in the fields where they have had their training.

There are several reasons why the standard of efficiency in the care of the injured person is so low, or why so few doctors are really properly qualified to care for a person seriously injured in various parts of the body. In the first place, too few surgeons have developed an interest in trauma, and no special effort has been made in medical schools or in residency training programs to teach the various aspects of trauma. In the second place, trauma may affect so many different regions of the body that it crosses the line of numerous specialties. This sets the stage for confusion of effort and inefficiency, unless the physician in charge is well qualified in various aspects of trauma, and able to recognize danger signals in all areas of the body. This does not mean I am recommending the creation of a new specialty; far from it. I am emphasizing strongly that all physicians, particularly surgeons, should have more of their training period devoted to a study of the injured. Trauma is a field where the specialty bars should be modified in that each specialist should study trauma in other specialty fields. However, I am just as emphatic in saying that wherever specialists are available they should and must be called in to treat the injuries in their field.

Certain groups have been making a study of this

trauma problem but unfortunately the solution is not going to be simple. In my estimation the establishment of residencies in trauma should not be encouraged except as a rotation for a period of months for trainees in various surgical specialties. In other words, more emphasis should be placed on trauma during the training period of all specialists, and more emphasis should be placed on trauma in the examinations of the various specialty boards.

COMPARISON OF CODES OF ETHICS OLD AND NEW

Although diagnostic and therapeutic procedures may have changed tremendously during the past several centuries, has the code of ethics changed similarly? I can assure you that in certain aspects the change has been precipitous, but perhaps in a different way from what you might suspect, because they have become much more lax rather than strict. It might be of interest to tell you about the *Code of Hammurabi* which existed in Babylonia about 1900 B.C., nearly 4,000 years ago. From this *Code Castiglioni* in his *History of Medicine* quotes as follows concerning the wounds resulting from operations:

"If a physician shall produce on anyone a severe wound with a bronze operating knife and cure him, or if he shall open an abscess with the operating knife and preserve the eye of the patient, he usually shall receive 10 shekels of silver; if it is a slave, his master shall usually pay two shekels of silver to the physician.

"If a physician shall make a severe wound with an operating knife and kill him, or shall open an abscess with an operating knife and destroy the eye, his hands shall be cut off.

"If a physician shall make a severe wound with a bronze operating knife on the slave of a free man and kill him, he shall replace the slave with another slave. If he shall open an abscess with a bronze operating knife and destroy the eye, he shall pay the half of the value of the slave."

CHANGES IN THE DOCTOR-PATIENT RELATIONSHIP

As civilization progresses, numerous changes in the attitudes and philosophy of people are bound to develop. The most important changes in this respect are related to the fact that the lay public desires and in fact demands more information about its health than it did four or five decades ago. Although this may require more of the physician's time it is nevertheless a very healthy sign, and in my mind entirely justifiable; it will almost certainly save lives by making the people come to the physi-

cian earlier, when eradication of their disease is more readily accomplished.

The attitude about cancer illustrates the above point quite well. I can remember very vividly during the days of my youth that the development of cancer in an individual was considered such a disgraceful catastrophe that people talked only in whispering tones about the sad plight of their friends so afflicted. Moreover, people with cancer were avoided just as the smallpox victim was avoided a century ago and still is, on the assumption that cancer was contagious. Even though the disgraceful and contagious phase of cancer has been abolished in the minds of lay people, they still have a healthy fear of the disease, and rightly so. Because of that fear, people want to know something about the early manifestations of diseases like cancer, realizing that the chances of cure are best in the early stages of the disease. Some physicians have the idea that giving lay people information about early symptoms of diseases such as cancer is apt to create a serious cancer phobia in many individuals. From my own experience, I am definitely of the opinion that this idea is erroneous, and that much more good than harm will come from this type of instruction in lay education. I firmly believe that if a physician cannot allay the fears of a patient after a thorough examination with negative findings, then either the physician has performed his duty ineffectually, or the patient is so emotionally disturbed that he would develop some other type of phobia anyway. After all, we want our lay friends to have a deep respect for, and some fear of cancer. Too often indeed, in answer to our question as to why therapy has been delayed, patients with advanced cancer tell us they did not come earlier for therapy because the lesion caused them no pain, and they did not want to "bother" their physician with something they thought was of no consequence. I see no better way of getting these patients to the physicians early than to instill in them a certain fear of lumps throughout the body, at least sufficient fear to make them consult a physician as soon as a lump is discovered, or significant symptoms develop.

ON WHAT TO TELL THE PATIENT WITH CANCER

Of recent years there is much discussion about the advisability of routine prophylactic examinations for cancer and other serious diseases in people

who are supposedly asymptomatic. Some physicians are opposed to them. Here again, I wish to say I favor the idea because we already know a certain percentage (1 to 2 per cent) of this group of people without symptoms, going to physicians, actually have a cancer. Moreover, numerous other unsuspected lesions or diseases are found (as high as 20 per cent in certain reports). Again, I want to emphasize that we can cure most cancers if they are found early enough; we can also say that cancers are so far advanced by the time they produce significant symptoms that when patients are treated under these circumstances, the five-year survival rate is very disappointing. Accordingly, without entering the controversy as to how often routine examinations should be made, I am making this plea to respect your lay friends' request to examine them for cancer and other diseases. This examination will serve two purposes; it will ease the individual's mind and may reveal a disease which can be treated effectively in its early stages.

I wish to bring up another controversial point about lay education, namely, the question as to whether patients should be told when they have a cancer. I do not believe this question can be answered categorically. Each patient should be individualized. Some people are so apprehensive that this knowledge would make the rest of their life miserable. Under such circumstances I believe it is better to be completely frank only with some responsible member of the family; the patient can be told he has a growth which must be removed lest it invade the body. However, on many occasions, business men will ask you to be sure to tell them if they have a cancer which might result in their premature death. Under such circumstances, and assuming we are dealing with a fairly stable individual, I am convinced we should be frank for two reasons: In the first place it is usually very important in the future care of the patient's family for the head of the family to be aware of the possibility of a premature death; in the second place such people usually have enough strength of character to adjust to this knowledge, and live the rest of their lives without jeopardizing their emotional stability. When metastases develop and the patient is aware of their possible significance, I strongly emphasize that after we have utilized and perhaps exhausted our therapeutic measures we make strong psychologic use of the fact that occasionally malig-

nant tumors spontaneously stop growing. Under such circumstances most people are surprisingly content so long as they know there is a possibility the tumor will be brought under control, even though that possibility is remote. The medical profession has not made proper use of this valuable asset in allaying the fears and apprehension of the patient or relatives.

CHANGING TIMES AND THE COLLEGE

Although the main programs being supported now by the College relate to education, surgical standards and ethics, years ago perhaps the most important of its programs was standardization of hospitals. Recognizing the tremendous need for elevation of standards of hospitals, the College began this program in 1918 and continued it until three years ago when the program was taken over by the Joint Commission on Accreditation of Hospitals. This program is one of the most important contributions made by the College. During the 35 years it was supporting this program the College spent approximately \$2,000,000 on it.

However, the increasing number of hospitals and mounting costs associated with hospital inspection made the program too expensive for one organization to support it alone. Late in 1952 when the College turned over this program to the Joint Commission there were 6,840 hospitals in the United States with 1,573,014 hospital beds. It is obvious that the obligation of maintaining this program needs the support of numerous organizations. Actually, there are five organizations now supporting it through the Joint Commission; they include the American College of Surgeons, the American Medical Association, the American Hospital Association, the American College of Physicians, and the Canadian Medical Association; the annual cost of the program is roughly one half million dollars contributed by the five organizations.

Transfer of the financial obligation of the hospital standardization program has allowed the College to devote more time and money to the numerous activities it had initiated over the past few decades. In addition to its activities in the Joint Commission on Accreditation of Hospitals, the College now cooperates with the American Medical Association and American Board of Surgery in standardization of graduate training programs in surgery; carries on an extensive educational campaign in its annual as well as regional meetings; maintains committees with active programs in cancer, trauma and nutrition; publishes a surgical journal *Surgery, Gynecol-*

ology and Obstetrics; maintains a library for the benefit of physicians and surgeons, particularly its members; and carries on a motion picture program in numerous aspects of surgery. In addition it has launched an increasingly active campaign to improve the ethics of surgical practice. Accordingly, the functions and activities of the College are numerous indeed. Surely, all of us can be proud of its past accomplishments and no doubt will justifiably be more proud of its future accomplishments.

In closing, I want to congratulate the Initiates for achieving membership in the most important surgical organization in American surgery. I assure you its influence will flourish, and its accomplishments increase from year to year. I hope and know that you will offer it your faithful support and at all times give it your deepest loyalty and devotion.

Chicago Congress Attracts Doctors from Far and Near

ONE OF THE TRADITIONS of the Clinical Congress is its international atmosphere. That the forty-first Congress held in Chicago October 31 through November 4, 1955 furthered this tradition is attested by the fact that 30 countries were represented, in addition to Canada, the United States, the territories of Alaska, Hawaii and Puerto Rico.

The American College of Surgeons was happy to welcome registrants from Argentina, Australia, Austria, the British West Indies, Chile, Colombia, Cuba, Denmark, East Pakistan, Egypt, England, Germany, Greece, Guatemala, Honduras, India, Indonesia, Italy, Japan, Mexico, North Ireland, Panama, Peru, the Philippines, Portugal, Saudi Arabia, Scotland, Turkey, Venezuela, and the Virgin Islands. The government of the Virgin Islands sent Dr. Roy A. Anduze, of St. Thomas, as its official representative to the Congress.

The College hopes that all its members and guests from both far and near feel as did Dr. Walter Buce, of Lima, Peru, when he observed: "The week at the Clinical Congress is the best investment I have ever made in the improvement of my professional attainments."

Of the total registration of 10,205, doctors numbered 6,589. Doctors' wives and their guests came to 1,742; exhibitors, 927; others, including science writers, visitors to exhibits and staff, 947.

The doctors took in as much as possible of the five-day program on what's new and good in surgery and the surgical specialties. While broad in scope and physically immense, the program, thanks to both participants and listeners, had a feeling of intimacy. It included 28 panel discussions, four symposiums, a clinicopathology conference, two formal evening meetings, eight week-long postgraduate courses, 16 research and pure science ses-

sions, and a review morning devoted to what's new in surgery. While it is impossible to obtain an accurate attendance record for most of the sessions, the College by ticket count ascertains that 1,941 enrolled for the postgraduate courses. The more than 150 scientific and technical exhibits were well attended.

Thirty hours of television, 19 Ciné Clinics, and 104 motion pictures in 11 sessions were shown.

With the help of personal and technical innovations, the final steps in the three-year transition from the wet clinics of yesteryear to present-day visual education at its best can be attributed to the 1955 Congress. A personal touch was added to each telecast by what one observer describes as a "high-caliber, high-powered moderator" at the auditorium, and a "panel of experts" at Research and Educational Hospitals where TV sessions originated. Aided by the moderator, three-way conversations on the part of spectators, the operating surgeon and the panelists brought about a spontaneity and *rapprochement* hitherto lacking in this medium. This talking back and forth was made possible by technical arrangements provided by Smith, Kline and French Laboratories, sponsors of this section of the program. Other innovations were glare-eliminating instruments and a technique which permits division of the screen into sections so that, for example, a member of the panel can be seen questioning the operating surgeon.

Ciné Clinics and motion pictures complete the triumvirate which today make it possible for surgeons to "learn by watching the actual work of the masters." The Ciné Clinics made especially for each Congress so that the work of surgeons in distant places can be presented there and later at other A.C.S. meetings, are sponsored by Davis & Geck,