

TEACHING OF SURGICAL SPECIALTY *

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One of the most important basic aims of teaching specialty surgery is to give the future physicians a working knowledge of the various organ systems of the body that are amenable to surgical therapy. Since undergraduate teaching in general does not aim at producing a specialist but rather an intelligent general practitioner, the teaching of specialty surgery in the undergraduate school must deal with principles rather than techniques. Throughout the course, the teacher must continuously refer to the relationship between the organ systems of the body in general, not only from the physiologic and anatomic but also from the pathologic standpoint. In fact, to be complete, the symptomatic inter-relationship between the organ systems and the psyche should also be mentioned.

The teaching program of our Department of Surgery for the specialties include orthopedics, urology, neurosurgery, anesthesia, and plastic, soft tissue, thoracic and abdominal surgery; and is, roughly speaking, carried out by lecture-demonstrations. The lectures range from 25 to 75 per cent of the total class hours devoted to each specialty, with an average of 50 per cent. In some of the shorter courses like plastic and thoracic surgery, more lectures are given to cover the entire subject. Moreover, there are at times not many cases available for demonstration.

At this point, I would like to express my personal thoughts about lectures, that much maligned term which many faculty members in their zeal to improve the curriculum oftentimes berate as useless and many times call spoon-feeding. A lec-

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ture should not be a memorized recitation by the teacher of facts available in books, it should not be a didactic presentation which must be slavishly taken word for word by the student; neither should it be a synopsis or outline that is expected to be returned verbatim by the student during a written examination nor a lethargic monologue extolling the lecturer's wisdom and diagnostic acumen. A lecture, to my mind, is certainly not any of these. It should be something exciting to hear, something new that would awake the interest of the student on the subject at hand. It should make him wish to take a few notes but not all the words of his lecturer. It should make him feel that it would be a waste of time to put it down on paper because he would miss thereby the thrill of watching somebody talk about his favorite subject, yet it should make him feel sorry later on, that some of the beautiful phraseology was not put down for future reference. The lecture should make one feel that the subject matter was alive, vibrant (almost as if you could see the osteoblast crawling across the granulation tissue bridging a fracture); it should make the student feel that the subject matter is within his mental powers to grasp, his to take and make his own; it should make him feel a sense of mastery as intimacy with the details of the subject increases. No lecture by the same teacher on the same subject should ever be the same, no matter if delivered on successive days, for in the interval between one lecture hour and the next, the teacher must have grown up with his subject, for certainly no single moment in life is similar to the one preceding it nor to the one succeeding it.

The lecture should be an invitation to join hands with the teacher in a walk down the pathway of knowledge. True it is, that a lecture cannot and should not give all that there is to know about the subject. But the real lecturer will have opened up new vistas to the student, will have made him conscious of the trees in the forest. Thus considered and thus viewed, the lecture becomes a wonderful opportunity to offer a helping hand to the student, to interest him by simplification, to get him started on his own by exciting his curiosity. When teacher and students are in rapport in the course of a lecture, the distinction between teacher and student tempo-

rarily vanishes, and when the subject matter becomes more important than the lecturer or the lecture notebook, then the lecture is as it should be.

This brings us to the subject of correlation or interdisciplinary approach, according to the pedagogues from Diliman. Correlation should not be a problem, for every teacher must have his subject matter correlated with the basic sciences as well as with the other clinical subjects of the curriculum. After all, we are not teaching future physicians to think of a pair of kidneys without touching on their blood supply and therefore on the heart. The cardio-vascular system so important to the renal tissue for its task of homeostasis can hardly be discussed, too, in internal medicine, without reference to the response of the kidneys (blood vessels and parenchyma), in hypertensive and cardio-vascular and arteriosclerotic disease. The urine, for the efficient discharge of which, the whole system of tubes (histology) has been evolved by nature from the third germ layer or more specifically from the Wolffian ducts (embryology), could not have been formed without glomerular filtration so efficiently accomplished through Bowman's capsule (histology) by the differential pressure between efferent and afferent arteriole (physiology). The final product, comprising about 1/200 of the original volume of fluid at the level of the glomerulus is what the patient will call urine but what transformations it had to go through in its slow passage thru the coiled living tubes of the nephron still defy the laborious study of physiologists, physicists, biochemists and endocrinologists. For that matter, vital processes occurring in the renal tubules are still mysterious.

That, ladies and gentlemen, is what I understand by correlation, integration or interdisciplinary approach. Every time any medical subject is broached to a group of students, all adjoining facets, even of history, must be touched upon or must be understood within that background. That is why I believe the teacher must be well integrated in order to be good, must be in unison not only with his own subject, but with other subjects with his class and with himself.