

## ON THE TEACHING OF EAR, NOSE AND THROAT DISEASE

G. W. BOOT, M. D., CHICAGO

Eighteen years spent in the teaching of ear, nose and throat diseases have resulted in the development of definite convictions in my mind as to how this subject should be taught. I wish today to speak of two phases of this subject. The first concerns the teaching of the subject and the second the preparation of teachers.

The Model Medical Curriculum published by the American Medical Association in 1909 allotted 90 hours to the teaching of Ear, Nose and Throat Diseases, of which 40 hours were to be given to theoretical instruction, 40 hours to sectional teaching and 10 hours to quizzes, etc. In the University of Illinois the time devoted to this subject is only 60 hours, of which didactic teaching is given 16 hours, clinics 26 hours and sectional work 18 hours. This is but two-thirds of the time allotted by the Model Medical Curriculum and much less than is given at Rush Medical College where the requirements are 1.2 majors, a major being 60 hours of didactic work or 120 hours of clinical or sectional work. Loyola requires .8 major and Northwestern 16 hours of clinical work and 96 of dispensary.

When we consider the importance of ear, nose and throat diseases for instance; how most cases of meningitis have their origin in the ear, nose or throat; how the ear includes two senses, hearing and balance, and how important hearing is to our daily life and how completely dizziness due to disturbance of the organ of balance can interfere with our daily work; how adenoids cause deformities of the mouth, teeth, nose and chest; how often rheumatism, endocarditis, heart disease, appendicitis, gall stones and so on have their origin in the tonsils; how often tuberculosis is the result of defects in the nose and throat; then we have some small idea of how important these organs are in our daily life and how important it is that our physicians should be properly instructed in this subject.

The time allotted to the teaching of this subject is all too short, but it is not of the shortness of the time that I particularly complain but rather of the way time is wasted in teaching the subject.

To my mind, time spent in didactic teaching of ear, nose and throat diseases is time practically wasted, as is time spent in having students examine the normal subject and time spent in quizzing. In a branch where individual work is as necessary as it is in this, where but one student can see a drum membrane at a time, or the interior of the nose or larynx, why waste time giving didactic instruction when the student can read the same thing in any good text book? When there is so much to be seen and too little time to see it in, why ask the student to spend time looking at normal ears, noses or throats?

When no one but the assistant and often not even the assistant can see just what is being done in a mastoid operation or an accessory sinus operation, why spend time giving operative clinics of mastoid operations, nose operations or throat operations?

In other words, time devoted to didactic teaching and clinics is time largely wasted because the didactic work can be gotten just as well from the text book, and the student cannot see in the clinic anyway.

I repeat, the teaching in this subject, if it is to be of value, must be individual, so why not set the student at work at once examining patients? The object of teaching this subject is not, as some teachers seem to think, to teach the student just as little as possible so he will refer more patients to the professor who taught him, nor is it to enhance the glory and reputation of the teacher, but is to prepare the prospective physician to care properly for the ills of his patients and in this the public has a most vital concern. The time is past when medical schools were run for the glory and reputation of the professors.

I would suggest as a proper way to teach ear, nose and throat diseases, that didactic teaching be cut down to a minimum or dispensed with altogether, and that clinical

teaching, that is operative clinics, be very much reduced. Instead give all the time possible to examination of patients by the students. I know nothing that palls on the student so soon as examination of the normal individual, so waste no time having students examine each others ears, noses or throats. They can learn the technic of examination just as well on the patient and learn something of disease at the same time. They will run across plenty of normal ears, noses and throats in doing this so that they will have ample opportunity of getting a normal standard for comparison.

If at the State University the classes were divided into sections of not more than six or eight and given fifty hours of such practical work instead of the eighteen hours now required, while the didactic and clinical work was cut to ten hours, I am sure that the graduates would know much more about the subject than they do now.

I would suggest that the following is a practical way to get the most out of this work. Divide the class into small sections, require each student to have access to a good text book, and to own the common instruments for examination, such as a set of ear specula, a nose speculum, a tongue depressor, two sizes of throat mirrors and an applicator. Then at the beginning of each hour assign a patient to each student for examination. Let the class spend a half hour examining the ears, noses and throats of their patients under the guidance of the instructor. At the end of the half hour call the class together and have each student report on his case while the instructor examines the patient and sees that the student has reported correctly. If he has missed an important point let the instructor call his attention to it, and possibly require the student to re-examine his patient. At the same time let the other members of the class make suggestions, ask questions, and in other ways discuss the case. If the case has any unusual points about it, let all the section see it. Between this session and the next one require each student to read up his case and, if desirable, present an outline in writing at the next session of the section. In addition to this, assign each student a subject for a paper at the beginning of the



semester. The object of this is two-fold—to show the student the immensity of the specialty and to get him into the habit of using the library. For this purpose the subject should be one not easily copied from his text book, such as “A Sketch of von Helmholtz,” “A Review of Wilhelm Meyer’s Original Paper on Adenoids,” “A Review of Hutchinson’s Paper on Hutchinson’s Triad,” “The Anatomy of the Ear in Birds” and so on.

As to the second phase of my subject, it is well recognized in other lines of teaching that research is necessary to the development of good teachers. In the matter of research in ear, nose and throat diseases we are easily behind every other civilized country. It is true that we have a few large institutions devoted to eye, ear, nose and throat, such as the N. Y. Eye and Ear Infirmary, and the Illinois Charitable Eye and Ear Infirmary; but who ever heard of any reports of original research coming out of them? I have never heard of a single section of a temporal bone affiliated with so important a disease as Otosclerosis ever being in America. When we want to get any real knowledge of the Pathology of the Ear, Nose and Throat we are compelled to go either to German, Austrian or Swiss literature. We have no men trained in research work along this line. We have no facilities for research work along this line. Nowhere in the United States is there any large collection of anatomical specimens of the ear, nose and throat that can compare in any way with the material in the Hunterian Museum in London.

Now the opportunity to correct their faults is at hand. In Cook County Hospital is an abundance of material for instruction of students in the manner I have outlined. The attending men have begged for the chance of using it for teaching purposes, but we are almost invariably turned down by the colleges, for it would upset the established regime, or it would create rival courses, a state of affairs which to my mind is highly desirable, for nothing could do so much to stimulate a teacher to do better work than the knowledge that someone else would get the students to teach if his work were not satisfactory.

As to research, the State of Illinois is pledged to build a hospital in connection with the State University. Let the State give this institution ample means to carry out research in ear, nose and throat. Let it have a paid director in ear, nose and throat with paid assistants and technicians, ample dispensary facilities and laboratories, and let any one entering the hospital do so with the distinct understanding that in case of death a post mortem examination is to be held. Then let the men engaged in teaching have a chance to develop their ideas, and a real start will have been made in the study of ear, nose and throat diseases and we will soon be able to be independent of Europe for what we know about our subject.

#### DISCUSSION OF DR. BOOT'S PAPER

Dr. Latham heartily endorsed the paper. She urged that opportunities be given to research volunteers, provided laboratory equipment is given. These on the practical work done should be admitted for degree. Close relationship between the rhinologist, laryngologist, aurist and dentist for mechanical opening of the air passages at an earlier age than usually done is a great help. Clinical practical work by students in all public State institutions should be increased.

Dr. East expressed a keen appreciation for the research work carried on by Dr. Boot and lamented the fact that endowment funds are woefully lacking in the United States for research work.

The discussion was closed by Dr. Boot, who pointed out that his experience showed that the research work in the past in this country had depended almost wholly on personal ambitions that were often satisfied by sacrificing financial gain.