

## RESUMÉ OF MEETINGS — 1930 - 31

### EDWARD H. ANGLE SOCIETY OF ORTHODONTIA

#### *Southern California Chapter*

“How shall we carry on?” A special meeting of the Southern California Chapter of the Edward H. Angle Society of Orthodontia, held at its usual meeting-place—the Angle School Building, Pasadena—in September, 1930, was largely devoted to answering this question. Dr. Angle, guide and inspiration of the society since its inception, was no longer here to direct it.

After heartfelt testimonials were heard from the members present, tributes were read from Mr. E. H. Wuerpel, Drs. F. B. Noyes, R. H. W. Strang, W. E. Wilson, and from Mrs. Angle.

Under the presidency of Dr. George C. Chuck, with Drs. C. C. Steiner and I. Eugene Gould acting, respectively, as corresponding and recording secretaries, the chapter adopted for the monthly meetings of the year, a three-part form of program which consists, first, of papers by authorities in fields related to orthodontia; second, of a complete review of the accepted technique of treatment; and third, of reviews and discussions, under appointed leaders, of current orthodontic literature.

Among the outside authorities who helped to make our year worth while were Dr. Wm. Engelbach, specialist on endocrine glands; Dr. E. K. Shelton, of Santa Barbara, also an endocrinologist; and Dr. C. L. Lowman, Chief of Staff of the Orthopedic Hospital, Los Angeles.

By means of lantern slides and with actual patients, Dr. Engelbach showed diseased conditions and deformities produced by malfunction of the organs of internal secretion. He said that oculists, orthodontists and orthopedic surgeons sometimes treat abnormalities with splints or other mechanical appliances, when the real trouble, deeply rooted in the chemistry of the body, cannot thus be reached and corrected. He suggested, as a diagnostic measure, the comparing of the height and weight of orthodontic patients with tables of averages computed from the height and weight of healthy children of normal growth and of the same ages.

From his discussion it appeared clear that malfunction of ductless glands might explain some heretofore obscure etiology and difficulties of treatment of denture deformities. Yet while the importance of well-balanced endocrine reactions seems firmly established, the orthodontists present were far from

ready to accept what others have suggested,—that most orthodontic problems are of endocrine origin and can be solved by the administration of gland extracts.

At a later meeting, in speaking on "Roentgenographic Studies in Normal Development",\* Dr. Shelton pointed out that metabolism is governed by the amounts of endocrine substances in the blood. He illustrated with lantern slides that a ready index to the bony growth of a child, where glandular disorder is suspected, is the osseous development of his wrists and showed skiagraphs in which were compared the bones of the wrists of such children with those of other children of the same ages in which the osseous development was normal. The results were wholly convincing.

One of the most interesting and valuable papers of the year was that of an orthopedic surgeon, Dr. C. L. Lowman, on "Habits and Muscle Re-education". Dr. Lowman showed how strikingly similar are many of the problems of orthodontist and orthopedic surgeon. He said, in part: "The orthopedic patient is given a thorough physical examination, including that of the endocrine system because of its influence on bone formation. He is instructed in good associated health habits, such as proper breathing and correct diet, and his interest in the treatment is aroused by calling his attention to its effect on his health, his looks and his skill in games and work."

He said, "Habits are acts so oft-repeated that definite patterns are created in the nervous system from which definite actions result because of definite sequences stimulated by these patterns. We try to work with single groups of muscles and endeavor to replace bad habits, or 'motor nerve patterns', with good ones in one of three ways: by re-establishing former (normal) patterns, or educating the patient in new ones, or, if the first are irreparably injured, by substituting other patterns." He said, "that an associate, Dr. Stivers, had done some fine work in replacing normal speech patterns by artificial ones in cases where certain functions had been lost."

"In studying musculature", he said, "one must consider three phases: range, duration and force. Range is the distance between contraction and relaxation. Duration depends on whether the contraction is slow or fast. Force tells whether or not the contraction is strong."

"We must attempt to localize the muscles we desire to train, and our patients must have a mental picture of the actions they are going to perform.

\*Published in the Journal of the American Medical Association, March 7, 1931.

The brain works in terms of action, not of individual muscles. So we must study to see what exercises will best suit our purposes in individual cases.

We teach diaphragmatic breathing because this not only best fills the lungs, but is a powerful help in pumping blood to the heart, and also, through its attachments and connections, stimulates the other body muscles, improving the posture.

In training our patients, the psychological make-up must be carefully considered, as must, also, that of the one who does the training. The dolichocephalic, or long-headed type, is a high tension, live personality and needs to be calmed; to be held down. On the other hand, the brachycephalic, or phlegmatic type, needs to be 'pepped up'.

Important points in the treatment are the patient's interest, his attention to directions, and his concentration on the exercises. Overstimulation must be guarded against. The patient should quit the exercises feeling as though he could do more; not because he is getting tired. Five contractions of a muscle are enough to nourish it, and properly performed, are of far greater value than many more not concentrated upon. Making a game of the exercises is of great worth in stimulating a child's interest.

It is often important to center attention on relaxing the muscles antagonistic to the one to be contracted".

Dr. Lowman dwelt at length on balance of muscle pull and said it was impossible to keep long bones straight without balance of the muscles that energize them. Balance, to the orthopedist, would seem to be of the same value as to the orthodontist.

For lack of time the review of the technique of treatment was not completed during the year. The following members, however, prepared reviews and led discussions on the topics stated: Dr. Steiner demonstrated the correct method of taking plaster impressions; also, of soldering staples. Dr. Chuck analyzed the principles of the edgewise arch mechanism and demonstrated the proper method of arch-bending. Dr. Gould fitted molar clamp bands, and Dr. Lasher presented a clamp band with left-turn nut for use on lower right molars.

Several published articles by members and non-members were reviewed. Dr. Mary N. Bercea summarized two important papers by Professor Dr. A. Oppenheim, ("Prognathism from the Anthropological and Orthodontic View-points", Dental Cosmos, November and December, 1928, and "Negro Skulls", Dental Cosmos, June and July, 1930).\*

An article on "Orthodontic Diagnosis" by Dr. J. D. McCoy (Pacific Gazette, February, 1931) was reviewed by Dr. J. Howard Furby. At another meeting Dr. Furby analyzed and led a discussion on the auxilliary springs which Dr. R. H. W. Strang has devised as supplemental to the new Angle mechanism.

Dr. George C. Chuck cited an article on "An Open Bite Case—A Partial Result and Why", by W. W. Woodbury, D.D.S., (International Journal of Orthodontia, January, 1931) as an introduction to a symposium by several members on the causes and treatment of this type of case,—problems which still seem far from satisfactory solution.

Other matters of special interest were Dr. Wilson's paper on "The Increasing Responsibilities of the Orthodontist"; Dr. Steiner's demonstration of an unusual vertical obturator successfully employed in a severe and difficult cleft palate case; the appointment on President Hoover's Child Welfare Committee of Dr. B. Holly Broadbent, a member of the society; Dr. W. E. Bedford's review of two articles: "Facial Growth and Mandibular Adjustment", by T. Wingate Todd, F. R. C. S. (Eng.) of Western Reserve University, Cleveland, and "Dr. Kingsley as I Knew Him", by T. Ledyard Smith, D. D. S.

Much credit is due Dr. Mary N. Bercea, Chairman of the program Committee, for her work in arranging the year's programs.

The first regular meeting of the year was held at Santa Barbara, Dr. and Mrs. L. G. Singleton of that city being our delightful hosts and providing an excellent program, at once artistic and instructive.

A report of the national conference of the society, held at Chicago in November, 1930, was made by our delegates, Drs. Chuck and McKenzie and Mrs. Angle. Their announcement of the contemplated publication of an official organ, to be called *THE ANGLE ORTHODONTIST*, was enthusiastically received.

The Angle Society was invited to participate in the proceedings of the International Orthodontic Congress, to be held at London in July of this year. The invitation was accepted. Later, however, finding the time allotted for its presentation wholly insufficient, the contribution was withdrawn from the program. It will appear serially, in enlarged form, in *THE ANGLE ORTHODONTIST*.

*\*Editor's Note:* The reviews of Dr. Oppenheim's work, by Dr. Bercea, and of Dr. McCoy's article, by Dr. Furby, appear in this issue.

A number of important business matters were handled during the year, and preliminary steps were taken in preparation for the annual meeting of the society, to be held in Pasadena, March, 1932.

Dr. Wilson was elected president of the Southern California Chapter for 1931-2 and the acting secretaries were re-elected.

At the opening meeting of the year one of the members said, "Words and sentiments may be beautiful, but our actions will more truly express our appreciation of what Dr. Angle has done for us than anything we might say. He tried to raise us to a plane upon which we could stand alone. This year will put us to that test". The test has been a severe one, but we shall continue our earnest efforts to "carry on"; to find "the one best way".

I. EUGENE GOULD,  
*Recording Secretary.*

\*The proceedings of this meeting were published in the January, 1931, issue of this journal.