

Growth Studies in Orthodontic Science

Correlated Growth studies are beginning to make their imprint upon the calloused surface of dental thought. For many years, Todd, Broadbent and their associates at Western Reserve University; Washburn, Ketcham, Humphries and Waldo at the Child Research Council in Denver; Lewis at the Merrill Palmer School in Detroit, and the investigators of the Harvard Growth Study have been telling the profession significant features of their particular research activities. The orthodontic specialty has passed successively through periods of indifference, boredom, skepticism, confusion and finally registers frank interest which borders upon enthusiasm. The importance of general and local factors which influence regional growth is being acknowledged to be of clinical significance, from the standpoint of orthodontic diagnosis, treatment and prognosis.

While some of these ideas are new, much of the concept is in reality only a more accurate interpretation and rationalization of old facts. For example, the premature loss and too long retention of deciduous teeth have long been considered as etiological factors in malocclusion. It is now suggested that these causes are influenced by the particular body developmental pattern and the effect of disease processes on this pattern. Likewise, hereditary factors such as congenital absence of teeth have a definite influence upon growth. The intimate relation between function and growth has long been recognized. More recently the idea of ectopic eruption advanced by Lewis is very intimately associated with growth, development and function. As Broadbent has repeatedly pointed out, his findings substantiate many earlier contributions which were based upon shrewd, empirical reasoning from clinical observations.

This new concept must be properly oriented with respect to these older, clinically-observed phenomena. It is not a matter of throwing over all that has been learned before, but rather gaining a new perspective in the light of these more recent interpretations. Indeed, certain of the older etiological factors, such as habits, accidents and, to a certain extent, function, are relatively little changed when considered from the more recent point of view.

Moreover, it is necessary to understand the physiological and anatomical changes, as well as technical method of their appraisal. If the studies in growth and development are to be used to advantage and without damage the student must seek a knowledge of the mechanism of growth and an understanding of pattern and pattern variations. He must also gain an intimate acquaintance with the instruments which are being used in the appraisal of growth and development if he is to exercise judgment with

respect to data which are being supplied from many and diverse sources. The proper evaluation and use of these data require fully as much, perhaps even more, study than that demanded for the mastery of a new appliance or appliance technic.

It can scarcely be said to the credit of the orthodontic profession that each new idea is carried far beyond the limits of its usefulness by proponents who have learned the words without mastering their meaning. Yet we have passed through eras in which isolated factors such as heredity and endocrine balance have been exalted far beyond their actual value, only to become discredited below their true worth in the reaction which must inevitably follow. In the light of this past experience it is well to remember that enthusiasm of the moment by followers rather than leaders in the study of these ideas may seriously handicap their usefulness. Unintelligent application of the concepts which are being advanced at the present time may be so energetically and superficially pursued as to approach a fad, the reaction to which may impede rather than advance orthodontic science.

H. J. N.

The Central Society of Orthodontia

There was organized, at the time of the mid-winter Clinic of the Chicago Dental Society, a new orthodontic society. This organization was brought into being to serve as the regional component society of the American Association of Orthodontists, and will provide membership for members of that Association practicing in Illinois, Wisconsin, Minnesota, Iowa, Missouri and Nebraska. Dr. B. E. Lischer of St. Louis, Missouri, was elected as first president of this Society, and Dr. L. B. Higley of Iowa City, Iowa, secretary and treasurer. As contemplated at the present time, the Society will meet bi-annually, alternating with the meetings of the American Association of Orthodontists.