

Review Of Current Literature

The Place of Myofunctional Treatment in Correction of Malocclusion

ALFRED P. ROGERS, D.D.S., A.M.

Journal of the American Dental Association, January, 1936.

In this excellent paper Dr. Rogers discusses those principles that are based on biologic facts underlying growth and development and which tend to minimize the use of mechanics by placing stress on the natural and fundamental processes of development. The purpose of this paper is to relate some of these principles and to illustrate the resulting tendency toward a more normal development and the place of myofunctional therapy in the treatment of malocclusion.

Dr. Rogers states that the idea underlying a study of myofunctional treatment is for the purpose of learning "to take advantage of inherent forces in order that we may, when necessary, safely discard mechanical procedures in the interest of normal processes of growth." These natural agencies can be made to do some things that no appliance will do and often will supplant mechanical retention in whole or in part. The value of preliminary myofunctional training before mechanical treatment is discussed. Successful treatment depends upon how well the associated parts are returned to normal, hence extraction of teeth, which makes the normal state forever impossible, is necessarily contra-indicated.

A complete description and discussion of the use of the various exercises is related. Exercises described are the Masseter-Temporal, Pterygoid, Tongue, Orbicularis Oris and a general tonic exercise.

Changes in the condyle of the mandible following functional stimulation are also discussed.

G.P.

Heredity in Dentistry

CLYDE E. KELLER, Sc.D.

Boston, Massachusetts

The Dental Cosmos, December, 1935.

For several years the author has been investigating the hereditary nature of dental variations. This article presents and analyzes fifty-two pedigrees of dental anomalies from the author's own studies and from the literature. Included in the various anomalies which were studied are fused lower incisors; absence of upper and lower central incisors; absence of pre-molars; absence of many teeth; supernumerary teeth; general early decay; V shaped dental arches and several other conditions. Each is analyzed and illustrated from as many case pedigrees as were available.

The author believes that the facts uncovered, point definitely and decisively to heredity as an agency in the production of a number of dental variations.

G.P.

Variations of the Maxillary Sinus as Seen in the Roentgenogram

LEROY M. ENNIS, D.D.S. and OSCAR BATSON, M.D.

Journal of the American Dental Association, February, 1936.

This article, while written primarily for the X-ray diagnostician and general dentist, will prove of equal interest to the orthodontist.

The authors trace the embryonic and post natal formation and development of the sinus. This is followed by a minute anatomical description of the relations, articulations, walls, vessels and nerves of this variably formed structure. The importance of a thorough clinical and X-ray examination, the importance of correct and intelligent interpretation of both clinical and radiographic findings, and the correct correlation of the two are all stressed. Photographs of skull material and X-rays are used to illustrate the various items under discussion so that the reader may better interpret the lines and shadows that are revealed in the X-rays.

G.P.

Roentgen-Ray Densitometric Measurements of Chromophobic and Chromophilic Areas in Dentin

GRANT VAN HUYSEN, D.D.S.

Journal of American Dental Association, December, 1935.

The Orthodontist interested in experimental research will find this article of great interest.

The author, heeding the suggestion of Beust "that an attempt be made to determine the changes in the development of the tooth by means of stains and to correlate these changes with the measurements of the same areas made by the roentgen ray densitometric method," has for his purpose such a study of stained tooth sections and compares the derived absorption values with the staining and optical properties of the dentin studied.

After a thorough study of the five prepared sections, the procedure of which is described in detail, his conclusions are as follows:

1. In these sections "the transparent and the opaque dentin absorb the same amount of roentgen-radiation. This is two to three per cent higher than absorption by unmodified dentin."
2. "The coronal dentin absorbs slightly more (two to three per cent) roentgen-radiation than the root dentin."

3. "Roentgen-ray absorption measurements are not always correlated with the staining or optical properties of dentin."

G.P.

Some Aspects of Dental Arch Growth

SAMUEL J. LEWIS, D.D.S.

Journal of the American Dental Association, February, 1936.

This is another of a series of studies made by Dr. Lewis at the Merrill Palmer School.

The author has applied modern methods of graphic and statistical analysis to the study of the complex mechanism of dental arch growth and adjustment. This particular paper deals largely with a discussion of width changes with special reference to the anterior segments of the two arches.

From the study of a large number of growth curves, certain features of the normal process can be learned. Four normal case curves are given and these show that normal occlusion may be reached by devious paths. The normal is compared to the abnormal and to each other by analysis of the curves of cases in which there has been premature loss of some of the posterior teeth, by a Class II, Division 1 case, and by a case in which one of the lower permanent incisors is missing.

From his studies the author believes:

1. Intercuspid growth is coincident with the eruption of the incisors and cuspids.
2. The amount of increase is conditioned by the increased material of the permanent teeth.
3. The pattern of growth may be modified by various developmental factors that occur as the teeth take their place in the arch.
4. The essential factor in good alignment of the anterior permanent teeth is growth adjustment during or after eruption.
5. Adjustments occur during quiescence periods in growth.
6. Usually the mandibular teeth erupt first and furnish the form for the maxillary teeth. This shows the necessity for maintaining normal mesio-distal arch relationship.

G.P.

Report of the Council on Dental Therapeutics

The Council on Dental Therapeutics has authorized the publication of a report representing its position on calcium and phosphorus medication for the prevention and control of dental caries. This report will be found on page 139 of the January, 1936, issue of the *Journal of the American Dental Association*.

G.P.