

## Review of Current Literature

### Constitutional Inferiority in Infancy

A. S. SOKOLOW, M.D.

*Moscow, U. S. S. R.*

American Journal of Diseases of Children, Vol. 49, pp. 1400-1410, June 1935.

Defining constitutional inferiority as "some condition of the organism, i.e. biochemical, physicochemical, etc., or some peculiarity of its tissues or organs, in consequence of which the organism is removed to the limit of its adaptability to its surroundings, i.e., to the limit of the normal "(Pfaundler)," the author discusses the nature of the condition and relationship to morphological anomalies.

With respect to etiology, recognizing the inadequate state of our knowledge, the following is of value from a hypothetical point of view: "On the one hand, an injury may produce different morphologic deviations characterized by retardation of the embryonal development; on the other hand, a supposedly similar injury may produce some functional disturbances of the tissues and organs which develop from the mesenchyma."

"An organism which develops from a damaged germinal element and has a retarded embryonal development or has some functional disturbance may be considered to be constitutionally abnormal."

"Quite different factors obtain when an embryo is exposed to some injurious influence at a later period of intra-uterine life and after the organs and tissues have been developed from normal germinal elements. The constitutional conditions of the organism may, in such a case, be considered to be normal, and almost all the malformations which occur are mechanical in origin, for instance, pes varus or caput obstipum. That is my theory of the possible genesis of constitutional inferiority in infancy."

Dr. Sokolow reports the incidence of stigmas of degeneration in 3,644 infants, 1,302 of which were healthy infants, 1,835 sick infants from an outpatient clinic and 527 infants with more acute or serious illness. From these data it appears that there is a correlation between the degree of illness and the incidence of deformities, particularly when the deformities are multiple.

The question of whether or not these sick children possess a degree of constitutional inferiority which predisposes them to illness because of their poorer adaptability to surroundings is raised. Age is regarded as significant

for it appears that as the child grows older, having survived the dangers of the younger period, the handicap is diminished.

### **Reviewer's Note**

The presentation of Dr. Sokolow is deserving of consideration and further investigation with respect to the development of malocclusion. His recorded incidence of accurate palate increases as other stigma increase. This may be true of other oral conditions not reported. The consideration of malocclusion as a manifestation of either local or general tissue peculiarity should be worthy of careful study. And a differentiation of these conditions from those which arise from other causes, particularly mechanical pressures or perversions of normal physiological elements of the denture and surrounding muscular tissues, would be both interesting and valuable. It is not at all unlikely that certain orthodontic cases arise from constitutional defects inherent in the tissues whose response is vital to successful therapy. Others quite obviously are not complicated by any factor which of itself stands in the way of satisfactory accomplishment of tooth movement or the normal reactivity of the supporting tissues to stimuli after the removal of appliances. The significance of reliable data of this character from the standpoint of prognosis and therapy would be a welcome addition to the knowledge of clinical orthodontics.

H.J.N.

### **Acid Base Balance of Diets Which Produce Immunity to Dental Caries Among the South Sea Islanders and Other Primitive People**

WESTON A. PRICE, D.D.S., M.S., F.A.C.D.

Dental Cosmos, September 1935.

This is another of Dr. Price's interesting articles based on his studies of diets of various primitive peoples. The author discusses the recent findings by Jones et al who emphasized the factor of potential alkalinity as the important dietary factor in the control of caries. In contrast, in four out of five of the primitive races studied by the author, the immunity producing diets were found to be higher in acid factors than in base factors. Further, he found that, "in changing from high immunity to high susceptibility diets there was no increase in potential acidity with increasing susceptibility to caries."

G. P.

### **An Objective Study of Constitution in the Child**

T. WINGATE TODD, M.B., Ch.B., F.R.C.S.

Dental Cosmos, September 1935.

The author presents a consideration of the factors entering into constitution and its relation to the teeth. An adequate summary of such a well written article is hardly possible for each word of the original tells the reader something of importance.

G. P.

### **Our Changing Concept of "An Adequate" Diet in Relation to Dental Disease**

MARTHA R. JONES, Ph.D.

*Honolulu, Hawaii*

Dental Cosmos, July and August 1935.

In this article the author gives details of the dietetic experiments conducted by her or under her supervision among the people of the Hawaiian Islands. The relation of diet to the teeth and various systemic diseases is fully discussed. Investigations of other researchers in this field are reviewed and evaluated. Particular stress is laid on the question of acid-base balance.

G. P.

### **Human Facial Types—Facial Expressions**

R. TAIT MCKENZIE, M.D., LL.D., R.C.A.

*Philadelphia, Pennsylvania*

Dental Cosmos, July 1935.

This article is one of a series of lectures comprising a symposium on "The Human Face." Dr. McKenzie is a nationally known sculptor and presents the relations of facial expressions to various emotional states. The article is well illustrated, showing masks, sketches, action photographs, etc., of the various facial contortions. Each emotional state is considered and the role each muscle plays in formation of the particular associated facial expression is discussed in detail.

G. P.

### **The Face in its Developmental Career**

MILO HELLMAN, D.D.S., Sc.D.

*New York, N. Y.*

The Dental Cosmos, July and August 1935.

Dr. Hellman's article deals with the relation of teeth and jaws to facial development. Measurements were made on children of all ages. Males stu-

died numbered 705; females 988. Twenty-seven measurements were recorded on each child making a total of 45,711 individual measurements used in the study. By use of averages derived from many measurements general trends can be studied instead of individual differences. In this way the periods of developmental changes are easily shown as in earlier articles by the author. Charts, graphs and percentage calculations are used to correlate the findings.

G. P.

### **Relation of Diet to Health**

AGNES FAY MORGAN, Ph.D.

*Berkeley, California*

Journal of American Dental Association, September 1935.

Dr. Morgan discusses the dietary health relationship under three headings. These are: 1. Diseases produced by faulty nutrition, i.e., due either to diet deficiency or to some obscure fault of metabolism. 2. Diseases of unknown causes which are alleviated or cured by dietetic treatment. 3. Some indications of possible positive improvement through nutrition in physical development and maintenance of health beyond that now considered adequate.

Discussed, in the first group, are the usual vitamin associated diseases and certain other conditions including goiter, anemia and digestive disorders. Considerable space is devoted to the presentation of clinical and experimental evidence pointing to the dangers attending over doses of the various diet components, especially the much prescribed and much used vitamin D factor.

G. P.

### **Post Natal Development and Calcification of the Anterior Permanent Teeth**

RUDOLF KRONFELD, M.D., D.D.S.

*Chicago, Illinois*

A.D.A. Journal, September 1935.

Dr. Kronfeld, in this article, considers, in brief, the history of the upper and lower incisors and cuspids from birth to time of their eruption. The same plan of investigation as used for the study of the first permanent molar was followed. The literature of previous investigators is reviewed, followed by a discussion of the permanent anterior teeth for the following age periods: new born, two months, six months, nine months, one year, two years, three years, and four and one half years."

The author summarizes as follows:

1. At birth, no calcification has taken place in the permanent anterior teeth.

2. At two or three months, enamel and dentine formation has begun in the upper central incisors and lower incisors. The upper and lower cuspids begin to calcify at approximately one month later.

3. At six months, calcification is found in the following anterior teeth; upper centrals and cuspids and lower incisors and cuspids.

4. The upper lateral incisors begin to calcify at approximately one year.

5. The enamel at the tips of the upper centrals and lower incisors become mature (acid soluble) at approximately one year; that of the cuspids at one and one half years, and that of the lateral incisors at two years.

6. After the fifth year, the enamel of the incisors is completely formed and matured; after the sixth year, that of the cuspids.

7. The distribution of enamel hypoplasia is an accurate record of the sequence of calcification and the relative degree of development of the various teeth.

A summary of data of the other permanent teeth closes the article.

G. P.