BOOK REVIEWS

Betty J. McWilliams, Ph.D., Editor

CHASSAN, J. B., *Research Design in Clinical Psychology and Psychiatry.* New York: Appleton-Century-Crofts, 1967, 280 pp. $5.75.

Dr. Chassan addresses himself specifically to those who perform and those who consume research in the area of human psychopathology. While clinical psychology is prominent in the title of this slim volume, the orientation and the examples used are primarily psychiatric. Within this relatively restricted range, Dr. Chassan has turned out a book of considerable merit.

This work is not a general consideration of research design. The author has limited himself to specific types of clinical applications. Thus, for example, many of his illustrations deal with strategies of measuring the effectiveness of a drug by using placebos. The reader will find that Dr. Chassan puts forth an excellent exposition of the strategies of double-blind studies, the applicability to clinical research, and some limitations of the double-blind approach.

Dr. Chassan distinguishes between two experimental models: the extensive model and the intensive design. The extensive model is the familiar group difference approach where, by statistical analysis, two or more groups of patients are compared. The intensive design, in contrast, assesses variability within each patient over time so that for *each* patient a probabilistic statement about the behavior under observation can be made. Dr. Chassan proposes the use of the intensive design in those clinical studies where the behavior of each patient as an individual is the focus. He illustrates this approach in clinical ratings of patient behavior and indicates how the intensive model might be applied to psychotherapy.

This reviewer finds the book a curious mixture of the simple and the sophisticated. Early in the volume the reader is given relatively simple illustrations and examples of statistical techniques such as chi-square and Student's *t*-test. In contrast, when the author is expounding the intensive model, he assumes that the reader has some knowledge of autocorrelation and its implications. Wherever statistical procedures are discussed, however, the reader is referred to one or more appropriate sources.

It is important to point out that this volume is not a general exposition of research design, nor was it intended to be. It does take the application of a few limited research designs and examines them carefully. To those working in the area of psychopathology, this volume

will have particular value. The rest of us will have been treated to uneven, sometimes irritating, and frequently challenging reading.

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GEIST, HAROLD, *A Child Goes to the Hospital: The Psychological Aspects of a Child Going to the Hospital.* Springfield, Illinois: Charles C Thomas, 1965, 112 pp. $5.75.

This is a book of advice. The book is intended for all who work with ill children as well as for parents. The author hopes by his suggestions to prevent the emotional problems which follow hospitalization. Chapters 1, 2, 3 and 6 are concerned with what parents should tell the child when he becomes ill or when he has to go to a hospital. Chapter 4 is intended for nurses, and Chapter 5 contains suggestions to physicians. Convalescence is dealt within a separate chapter. The final part of the book refers to special situations, such as operations, emergencies and chronic illness.

The author gives very specific advice to both parents and professionals. He makes suggestions concerning a wide variety of topics including areas of professional functioning. This necessarily results in his dealing with complex issues in a brief and simplified fashion.

Several general considerations will limit the usefulness of this book for certain people. The author attributes to hospitalization a variety of psychological aftereffects. The evidence for some of these is pretty thin. In addition, I seriously question the advisability of telling parents that schizophrenia is a possible outcome of improper handling of a child's visit to the hospital. To have parents read material which is designed for the professional people who will be caring for their children might well instill additional complications into an already complex situation. I also suspect that many professionals will react negatively to suggestions which are specialized technical matters. A case in point is the author's recommendation to the anesthetist to use a certain drug in a certain way. In the section, "Suggestions to Nurses", the author gives the impression that he is instructing the nurses in play therapy. From the point of view of a child psychiatrist, this section deals with a vast and complicated topic in what is at best an inadequate manner.

The book includes a bibliography of 66 items, not all of which are used in the text. A certain lack of organization was evident in the arrangement of chapters, and especially in the use of subheadings.

I would be unwilling to use this book in my own professional work

with parents of sick children or with professionals who take care of them.

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JOHNSON, D. J., and MYKELBUST, H. R., *Learning Disabilities: Educational Principles and Practices*. New York: Grune and Stratton, 1967, 336 pp. $9.75.

The group of children about which this book is written does not represent a new breed or a recently identified clinical entity which has suddenly come to the attention of behavioral and medical specialists. In fact, these youngsters have been an enigma to their parents, diagnostic and remedial specialists, and educators for many years. Children with learning disorders may exhibit a range of mild to severe disabilities in any number of areas including speech and language, perceptual-motor development, general or specific behavior, social development, emotional stability, subject matter performance, et cetera. These weaknesses may be present, and frequently are, in spite of "normal" intelligence. Because of this heterogeneity of characteristics, children with learning disabilities defy any of the traditional systems of classification; they may be found in regular as well as in special education classrooms.

On the basis of a number of years of experience with learning disabilities of various types, Johnson and Mykelbust present a point-of-view, guiding principles, and specific remedial practices, which they, as clinicians, have used in working with children who have difficulty learning. In the first part of the volume, the authors discuss the psychoneurological framework which they use, and they emphasize that learning disorders are based on neurological dysfunction resulting from endogenous involvement, or exogenous involvement, or both. Their lack of specificity as to the potentially deleterious influence of children having been reared in a restricted environment may precipitate some argument from the ardent environmentalists.

The remainder of the volume is devoted to a description of specific diagnostic and remedial procedures in various areas, including auditory and written language, reading, arithmetic, and nonverbal learning. No treatment is given to those learning disabilities that are related to personal, emotional, and social dimensions.

The authors eschew the use of a single procedure in dealing with learning disorders among children; their proper emphasis is on clinical instruction which is based on the clear identification of each child's relevant pattern of strengths and weaknesses. Particular emphasis is given to the means by which control can be exercised over the child's environ-

ment for maximum payoff to be realized. This suggests that stimulus input must be carefully regulated, material properly sequenced, potential distractions controlled, reward intelligently dispensed, and evaluative procedures constantly employed throughout the process.

Throughout the book the authors give careful attention to the need for basing their practices on principles of learning. They focus on the need to match the remedial program to the child rather than requiring a child to adjust to *the* method. This emphasis is refreshing.

Johnson and Mykelbust have written a book which will be particularly helpful to clinicians who are concerned with modifying the environment of children to enhance learning. While the specifics embodied in their suggestions for diagnoses and remediation may not be of direct relevance to specialists representing the healing arts, they will find comfort in the realization that behavioral specialists are finally giving more than lip-service to inter- and intraindividual variation.

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MECHAM, M., BERKO, M., BERKO, F., and PALMER, M. *Communication Training in Childhood Brain Damage.* Springfield, Illinois: Charles C Thomas, 1966, 392 pp. $11.75.

The purpose of the book is to present a survey of current advances in the area of communication problems in childhood brain damage. The book is intended to serve as a beginning text for students taking courses in cerebral palsy, psychology, and special education and as a source book for nurses, therapists, and members of related disciplines. This book is a revised edition of the 1960 publication *Speech Therapy in Cerebral Palsy* by Mecham, Berko and Berko. Although some portions of the previous edition have been retained verbatim, the current edition contains bibliographies up to and including 1965. The sections on brain damage have been amplified, and current educational methods in special education are reviewed. The appendix contains a nucleus vocabulary for speech therapy, and complete author and subject indexes are included. Chapters 1 through 6 have been written by Mecham. Chapter 7 has been written by M. Berko, and F. Berko has written Chapter 8. Palmer served as special author consultant in the preparation of the book.

The contents of the text deals with three main areas of information: a) Chapters 1 through 6 cover the nature and scope of cerebral palsy and a description of the basic criteria involved in the evaluation and management of speech and hearing problems in cerebral palsy; b) Chapter 7 describes the psychological and linguistic implications of brain damage in children; and c) Chapter 8 reviews and discusses the major educa-

tional aspects dealing with special education in the training of children with cerebral palsy.

The first six chapters deal almost exclusively with the multifaceted aspects of cerebral palsy. Chapter 1 presents a summary review of the major historical findings of the nature and scope of the problem. Chapter 2 describes the various types of speech, hearing, and language disorders and includes current research findings dealing with breathing problems, language development, and neuromuscular involvements of the speech mechanism. Chapter 3 contains a good frame of reference for the appraisal of speech and hearing disorders. Chapter 4 is a well written and cogent discussion of the team approach and the interdisciplinary needs in the management of children with cerebral palsy. Chapters 5 and 6 are concise and clearly describe procedures dealing with indirect facilitative approaches to speech and hearing training and language development. Chapters 4 through 6 should be of special interest to the speech clinician because they review some of the major considerations in procedures dealing with evaluation and therapy management of the child with cerebral palsy.

Chapter 7 is the only chapter in the book that deals with childhood brain damage in its broad aspects. The author describes brain damaged children as a group of children having similar behavioral characteristics, and who respond in a similar way to the numerous specialized, educational, and therapeutic approaches. The motor impaired child, the cerebral palsied, is only one of the types discussed in this chapter. In essence, this chapter deals with the overall dimensions of the brain damage syndrome and presents the authors' views of the types of psychological and linguistic evaluations and habilitative procedures inherent in the total management of the brain damaged child.

Dr. Berko describes deviant propositionality, visual-perceptual functioning, general rigidities, and initiatory confusion and delay in the child with brain damage. He sets forth a concise frame of reference for the basic considerations needed to appraise and assess the psychological behavior of the brain damaged child. The author has presented a broad compilation and survey of current research and sets forth his own point of view based on both clinical and research activities. Psychologists and speech clinicians should benefit from the practical discussion of the procedures involved in testing and interpreting scores made by children with brain damage. The contents of this chapter are very well done, but the chapter would have been greatly enhanced, especially for the beginning student, if more headings and subheadings had been used to appropriately delineate the various topics.

Chapter 8 presents a careful and thoughtful description of the rationale and current thinking dealing with methods and procedures in special education, with reference to the child with cerebral palsy. The author reviews the growing concept that there is a need for preschool

training for the cerebral palsied. She discusses the types of learning problems inherent in cerebral palsy, and describes in detail the scope of setting up developmentally normal approaches to learning and living for the cerebral palsied. Mrs. Berko lists guide lines for training in visual perceptual tasks, linear differentiation, handwriting, arithmetic, reading, and verbal communication. This last chapter should be of special interest not only to the teacher of the neurologically handicapped, but to the speech clinician, and to administrators of programs in special education.

In summary, it should be noted that although the title of the book implies that the subject matter deals with childhood brain damage, this book is primarily a text dealing with communication and training problems in cerebral palsy. Only one chapter, Chapter 7, deals with the all inclusive syndrome of brain damage. This book is a good survey of present research and clinical findings and should serve well as a text for beginning students in cerebral palsy, psychology, and special education.

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Proceedings of the Symposium on Orofacial Abnormalities. Wilmington, Delaware: Alfred I. duPont Institute, 1965, 105 pp. Price not available.

This book contains the material presented at the Symposium on Orofacial Abnormalities sponsored by the Delaware Cleft Palate—Orthodontic Clinic and held at the A. I. duPont Institute in Wilmington, Delaware, on April 24, 1965. There were three main speakers at the meeting, each followed by a discussant. In addition, there were three discussion groups. The topics included were 1) Plastic Surgery, 2) Orthodontics, and 3) Speech Pathology.

"The Historical Basis for Contemporary Cleft Palate Surgery" is the title of the paper presented by Dr. Richard B. Stark. As the title suggests, this presentation gives a survey of the historical background of cleft palate surgery from the first attempts in the 18th century to the various primary and secondary surgical procedures of the present day.

In discussing this paper, Dr. Lyndon A. Peer describes briefly three of the surgical procedures employed at present. These are the von Langenbeck, the Wardill, and the Warren Davis techniques. The advantages and disadvantages of each technique are discussed by Peer.

Dr. Sheldon W. Rosenstein's paper is entitled "Dento-Facial Orthopedics in the Newborn". The paper opens with a clinical review of the philosophy and the treatment procedures of this approach, which was first introduced by Dr. C. Kerr McNeil in 1950. Rosenstein then describes the procedure followed by himself and his colleagues. This paper is il-

lustrated with drawings and pictures of dental casts, appliances, and patients wearing appliances.

In responding to this presentation, Dr. John A. Cooper states that his experience has shown that the majority of cases do not require maxillary manipulation as described by Rosenstein. Instead, early and good surgical repair of the lip restores the anatomical and physiological aspects of the displaced segments. Thus, in these two presentations, the reader will find both the "pro" and the "con" for presurgical orthopedics.

The third area of the symposium was discussed by Dr. H. Harlan Bloomer in his presentation entitled "Problems in the Diagnosis of Cleft Palate Speech". This paper reviews the speech characteristics that are likely to be disturbed in cleft palate speech. Dr. Bloomer also discusses palatopharyngeal valve function. Two methods for evaluating the speech of an orofacially deformed patient are presented, along with examples of the results of the use of these methods.

In discussing this presentation, Dr. Betty Jane McWilliams points out the necessity of careful differential diagnosis so that the speech pathologist recognizes individuals who can accomplish better speech and those who cannot. She also underscores the fact that speech therapy is of no avail if there is not an adequate velopharyngeal mechanism.

The proceedings of the three discussion groups are included in the book. The value of the presence of this material lies in the specific questions in the areas of plastic surgery, orthodontia, and speech pathology, that were raised and discussed at the conference.

This book constitutes a brief overview or a short "refresher course" on the subject of cleft palate and the related disciplines of plastic surgery, orthodontics, and speech pathology.

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ABSTRACTS

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Albert, D. J., Plastics for the construction of maxillofacial prostheses. *J. Amer. dent. Assoc., 74,* 1241–1246, 1967.

Two cases were presented for whom maxillofacial prostheses were made of a recently developed silicone rubber compound. Use of this compound replaces more rigid discomfort-causing materials. Details were given for the procedures used in making appliances of the silicone rubber products. Cases were postoperative cancer cases. Use of silicone rubber compounds has possibilities for appliances for cleft palate patients, especially for making obturators. A useful list of commercial companies producing silicone rubber products is included. (Gassert)

Atkinson, Helen C., Care of the Child with Cleft Lip and Palate. *Amer. J. Nursing, 67,* 1889–1892, 1967.

The author discusses the techniques of feeding and oral hygiene, including the use of prostheses, to facilitate care during the four stages of treatment. Before definitive treatment, emphasis is placed upon adaptations necessary in feeding such as the

nipple with enlarged hole, special feeders like the two inch tubing attached to a syringe or eyedropper, positioning of the child, frequency of feeding, adjustment of mother and child to feeding, good burping technique, and preparation of formula. Equally important is the cleaning of the lip and mouth by swabbing and rinsing. Through the four stages of treatment, maxillary alignment, lip closure, alveoplasty, and cleft palate repair, the author describes the proper techniques of feeding, care of acrylic plate or silastic wedge, use of tongue blade splints, and the importance of careful oral and facial hygiene. Also stressed is the psychologic program, particularly in reference to nursing personnel, that must be carried out until completion of follow-up care, and the importance of the inclusion of parents in assisting in the care of the child. (Walling)

Bredy, Edmund, Huschke, Bernhard, and Wiemann, Christa, Die Bedeutung kieferorthopädischer Baßnahmen bei der Behandlung von Patienten mit Lippen-Kiefer-Gaumenspalten (The significance of orthodontic measures in the treatment of patients with cleft lip and cleft palate). *Mathematisch-Naturwissenschaftliche Reihe, 14,* 1965.

The authors outline the tasks of orthodontics in the treatment of cleft lip and cleft of hard palate. Success depends on a close and well-timed cooperation with the surgeon, the speech therapist and the prosthetist. Necessary surgery often has drawbacks like secondary deformations of the upper jaw, as they occur mostly in cases of total clefts, and these anomalies require a postoperative treatment with orthopaedic methods. The active plate with its modifications is recommended as the most suitable appliance for this treatment. In using the methods developed by Schweckendiek and McNeil, orthodontics enters the field of prophylactic measures. A suitable treatment, starting immediately after birth, can create favorable conditions for surgery which reduce the previously observed detrimental consequences to a minimum. Examples of postoperative and preoperative treatment with orthodontic methods are given for various forms of clefts. (authors' summary)

Brent, R., Medicolegal aspects of teratology. *Pediatrics, 71,* 288–298, 1967.

There is a great deal of confusion concerning the legal and medical aspects of human malformation. Teratology often presents specific problems which are separate from the normal realm of the medical and legal professions. Some of these legal complications include the following: a) who can be the plaintiff, b) the multiplicity of defenders, c) the legal rights of the fetus, d) the possible etiologic factors, e) the deficiency in expert testimony, f) the proof of negligence, and g) the inappropriate use of the so-called "sensitive period". Malformations, syndromes, and the etiology of human malformations were divided into four groups based on the probable relationship between a specific cause and the resultant malformation. These categories include: a) definite relationship, b) probable relationship, c) improbable relationship, and d) no relationship. The concept of a medicolegal work-up was introduced. One of the major errors committed in medicolegal cases results from failure of communication on the part of the parties involved, or unintentionally erroneous communication. A national committee should be set up to determine the etiological relationship between the suggested cause and the malformation, with no consideration given to the negligence aspect. Many problems still remain unresolved which often have religious and moral as well as legal aspects. A comprehensive bibliography in regard to medical and legal aspects is included. (Basili)

Bruno, S. A., Prosthetic treatment of maxillofacial patients. *J. Prosth. Dent., 17,* 497–508, 1967.

This article emphasizes the need for early consultation with the dentist. Adequate treatment involves preliminary steps by the dentist prior to surgery. The various phases of prosthetic treatment are discussed. A systematic approach is outlined, including: dental work-up, temporary treatment, radiotherapy, permanent prosthesis, and follow-up care. Specific problems of both mandibular and maxillary resections are discussed. (Swoope)

Burdi, A. R., Distribution of midpalatine cysts: a re-evaluation of human palatal closure mechanisms. *J. oral Surg., 26,* 41–45, 1968.

The aim of this study was to provide an embryologic explanation for the regional distribution of clinical nonodontogenic midpalatine cysts, which called for a re-evaluation of the classic description of fusion as the singular closure mechanism for both the hard and soft palates. Observations of 31 "normal" human embryos before, during, and after palatal closure (7 to 12 weeks, 18 to 75 mm. in crown-rump length): 1) verified an anteroposterior gradient of palatal shelf closure beginning at the premaxillary or primary palate; 2) demonstrated a sequential appearance, growth, and dissolution of epithelial fusion remnants in only the future hard palate regions of the secondary palatine shelves, and 3) suggested a consolidation of the soft palate and uvula not by fusion but by subepithelial mesenchymal merging of bilateral primordia without direct apposition and breakdown of epithelium. That the future hard and soft palate regions of the secondary palatine shelves may form by these two distinct regional mechanisms suggests an embryologic basis for the clinical localization of nondontogenic, actual and potential, fissural cysts to the hard palate. (author's summary: Berkowitz)

Burdi, A. R., and Faist, K., Morphogenesis of the palate in normal human embryos with special emphasis on the mechanisms involved. *Amer. J. Anat., 120,* 149–159, 1967.

In order to re-evaluate the classical description of fusion as the closure mechanism of the hard and soft palates a study was made of 31 embryos ranging in size from 18 to 75 mm, crown-rump length, and in age from 7–12 weeks, prior to, during and after palatal closure. Each embryo, after histological preparation and frontal sectioning, was studied by light microscopy and graphic reconstruction. Observations indicated that there is an anteroposterior gradient of palatal closure beginning at the primary palate and that epithelial fusion remnants are found only in the hard palate regions. It appears that soft palate development occurs by a displacement of epithelium by mesenchymal merging rather than by epithelial fusion of the entire secondary processes. Fusion may not, therefore, be the only mechanism in soft palate closure as classically described. (Schiffman)

Calderwood, R. G., Polydimethyl siloxane implants in oral surgery. *J. oral Surg., 26,* 33–40, 1968.

Medical grade silicone rubber was used as an implant material because of its ease of use and great adaptability. It can be substituted for either soft or hard tissues. The characteristics of the silicone implant and tissue responses are discussed. A transient inflammatory response which subsides in three to six days is described when a properly prepared medical grade silicone is used. Three cases are reported which demonsrate various applications of the material. (Berkowitz)

Caldwell, E. E., Anthony, J. A., Brown, Helena, and Crump, E. P., The Treacher Collins Syndrome. *Clinical Pediatrics, 6,* 715–720, 1967.

This paper describes the first case of the "complete" Treacher Collins syndrome, with chromosomal and other studies, in a Negro infant. The possibility of a mutant gene, as mentioned by Rogers must be considered in the pathogeneses of this condition. The outstanding characteristics and a thorough survey of the literature is listed with special emphasis on pathogenesis. (Berkowitz)

Červenka, J., Gorlin, R. J., and Anderson, V. E., The syndrome of pits of the lower lip and cleft lip and/or palate, genetic considerations. *Amer. J. human Genetics, 19,* 416–432, 1967.

Data from 66 individuals, having lip pits, and from their families, were analyzed. The present series, and 446 cases from the literature, with known sex and diagnosis, were used in establishing a 1:1 sex ratio. Frequency of the syndrome was estimated at 1:75,000 to 1:100,000 in the white population. The authors personally examined members of 23 families, and an additional 15 pedigrees were supplied by 5 collaborators. From a review of the literature an additional 28 suitable pedigrees were selected. All of these 28 cases had relatives with pits or clefts, as compared with only 26 of the 38 cases examined by the authors or collaborators. From the pooled data a total of 125 presumed carriers were thus identified in order to estimate patterns. In 25 of the cases (20%) neither clefts nor pits were found, which is equivalent to 80% penetrance. The variation in expressivity (re: separate signs) is shown by the fact that pits of the lower lip were found in 87 persons (69.6%) and clefts in 45 (36%). Based on this information counselling of patients or their parents with clefts (but without lip pits) remains the same. However, the situation is altered when associated lip pits are found, because all clefts in the family are now considered a part of the sydrome, and risk figures for clefts are shown to be remarkably higher. The risk of cleft formation in a child (95% confidence level) born of a parent: a) with pits only—22% (15–29%); b) with pits and cleft—39% (31–48%); c) with cleft only, but having parent or sibling with pits—30% (16–47%). It is suggested that the development of clefts in this syndrome may be influenced by modifying genes or by different mutant alleles with a predilection for the different types of clefts. (Adams)

Dixon, D. A., Defects of structure and formation of teeth in persons with cleft palate and the effect of reparative surgery on the dental tissues. *Oral surg., oral med., oral pathol., 25,* 435–446, 1968.

An investigation of the incidence of defective structure of the teeth in a group of 100 patients with clefts of the lip or palate. Enamel hypoplasia was believed to be postnatal in origin and histologic analyses strongly suggest that surgical repair of the lip and palate can contribute to this defect. The lip repair affects the cervical region of the crowns of deciduous incisors and the tips of the permanent incisor crowns related to the area of operation. Palatal repair is believed to affect crowns of permanent incisors. Surgery and feeding problems are potentially harmful to dental development and could contribute to the defects found in the molar teeth. A conservative surgical approach is therefore recommended. (Berkowitz)

Ewers, S. R., A study of prenatal growth of the human bony palate from 3 to 9 months. *Amer. J. Orthod., 54,* 3–27, 1968.

Roentgenograms of the palatal tissues of sixty-five fetuses ranging in age from

12 to 38 weeks of intrauterine life were utilized to study the dimensions and to evaluate growth changes of the prenatal palate. The growth rate of the fetal palate is more active in the dimension of width than in length. Activity in the midpalatal suture is mainly responsible for the rapid increase in maxillo-alveolar width, but appositional growth on the buccal surfaces of the alveolar processes also is an important factor. Increase in palate length is due mainly to appositional growth at the tuberosity area and also to some extent to growth in the midpalatal suture. The typically broad infantile palate is due to the fact that palate length lags behind palate width. Growth in the area of the midpalatal suture ceases at 4 to 7 years of age, and therefore in postnatal life palate length increases over palate width. (Luban)

Fogh-Andersen, P., Obturatorbehandling eller skesutteflaske til nyfodte ganespaltepatienter (Primary obturator-prosthesis or plastic spoon-feeding-bottle in the preoperative care of cleft palate infants). *Tale og Stemme, 26,* 141–147, 1966.

The editor (of *Tale og Stemme*) has asked me to comment on the above article by Epstein. In his report an attempt is made to prove the value of a primary prosthesis with obturator shortly after birth, as regards preventing colds and otitis, facilitation of feeding, and furthering speech development. The cost of the obturator treatment is estimated to an average of about 1050 Danish crowns (54£) per child. An analysis of Epstein's figures and tables, however, gives no statistical proof of preventing colds and otitis or furthering speech development. The facilitation of feeding is obvious, but many other procedures seem just as useful and much simpler and cheaper. At the National Institute for Defects of Speech in Copenhagen and at the Cleft Palate Clinic at Deaconess Hospital, Copenhagen, we recommend a special plastic feeding-bottle with a detachable plastic spoon as a routine. 2–3 bottles per child amounts to the cost of approximately 5 Danish crowns (5 shillings). The calculated differences, stated by Epstein, between the time passed in hospital after birth in the various groups of children with and without prosthesis are rather incorrect, due to some misundertandings, first of all in the form of inclusion of a series of "atypical" cases (i.e., with associated deformities or diseases, prematurity, etc.) in the "eastern" group and "western preprosthetic" group, and at the same time exclusion of a similar long-time case in the "western prosthetic" group. (author's summary)

Fogh-Andersen, P., Præoperativ forsorg for ganespalteborn i Danmark (Preoperative care of cleft palate children in Denmark). *Tale og Stemme, 27,* 67–80, 1967.

A further analysis of Epstein's report on primary obturator prostheses in the care of cleft palate infants (*Tale og Stemme, 26:* 77, 1966), compared with the corresponding hospital records from the Deaconess Hospital, Copenhagen—and supplemented with the results of Forchhammer's recent investigation, based on a larger number of patients (in this issue)—has shown: no statistical proof of difference in the growth of the children, the development of speech, or the occurrence of otitis in the groups with and without obturator treatment. During feeding, nasal fluid escape is slightly less with obturator prosthesis than with spoonfeeding-bottle. However, the disadvantages and expenses of the obturator treatment are not to be neglected—as already emphasized previously. The average preoperative time in hospital, i.e., between birth and cleft palate operation, for Epstein's entire material of 120 patients, is a little less than 4 weeks, 1 day shorter in the 60 obturator children, 1 day longer in the other group. As to isolated cleft palate, surprisingly, the stay in

hospital was 3 times longer in the western (obturator) group than in the eastern (non-obturator) group—presumably due to mere chance. In the lip-palate patients, conversely, the average stay was 2 times longer in the eastern than in the western series—due partly to chance, partly to apparent difference of source material (fewer associated malformations and diseases in west patients), and partly due to some cases of "unnecessarily" long hospitalization in the eastern area before the introduction of home-visits from the Copenhagen Institute for Defects of Speech some years ago; since then, no difference in hospitalization time between east and west patients is demonstrable. Conclusion: Early contact between cleft palate parents and the social special care is of conspicuous importance, not least for psychological reasons, and could be brought about most simply and inexpensively by home-visits from the State Institute for Defects of Speech—as it has been practiced in the eastern part of Denmark during the last 2–3 years from the Copenhagen Institute. (author's summary)

Forchhammer, E., Mere om sma born med ganespalte (More about small children with cleft palate). *Tale og Stemme, 27*, 81–91, 1967.

In connection with the article in this periodical by A. G. Epstein about preoperative treatment with prosthesis on cleft palate children, I have examined 463 forms made out just before the children at the age of 2 years were sent to hospital for their cleft-palate operation. The forms are based partly on examinations made by medical specialists and partly on statements given by the parents. The material includes 182 cases from the eastern part of the country where treatment with prosthesis is not used, and 281 cases from the western part of the country where the view is taken that treatment with prosthesis should be used as a general means. Though the treatment with prosthesis in the western part of the country is considered the only correct way, it has only been tried in 175 cases (62% of the 281 cases from the western part). A comparison of the circumstances in these cases with the cases where the treatment with prosthesis was not used shows no difference as far as the frequency of catarrh and ear infection is concerned. Regurgitation is found in 14% fewer cases among the children treated with prostheses. 33 out of 175 children treated with prostheses continued the treatment until the palate operation made at the age of 2. The rest gave up before then: 25 children gave up the treatment in connection with the lip operation when they were 2 months old, partly on account of the edema in the mucous membrane caused by the prosthesis. 21 children are said to be doing as well without as with the prosthesis, in 10 cases they managed better without. In 68 cases the prosthesis was not used because the children reacted against it, and in 16 cases the parents did not renew the prosthesis when it no longer fitted the child. Conclusion: 1) As a universal way of treatment of cleft-palate children until the age of 2 the prosthetical treatment cannot be carried through. 2) The only provable advantage as far as the prosthetical treatment is concerned is a small reduction of the regurgitation. 3) The prosthetical treatment does not generally make the absorption of food more easy. In some cases it encourages a catarrh and it has no influence on the frequency of ear disease. 4). The prosthesis implies the risk of sticking in the throat of the child and thereby causing suffocation. (author's summary)

Fraser, F. C., Cleft Lip and Cleft Palate. *Science, 158*, 1603–1606, 1967.

The author reports on the proceedings of a cleft lip and palate workshop recently convened to evaluate the current concepts of the origin of cleft lip and cleft palate, and to suggest areas of research for many unanswered questions. Embryological de-

velopment of the palate and lip is a complicated process involving the delicate integration of many processes. These may be disrupted in many ways at various points in the system leading to the cleft formation. More information is needed about the anatomical and biochemical events involved in formation of face, both normal and abnormal. Disruptive factors can be both genetic and environmental. Several tetrogens such as Cortisone, Salicylates, as well as a variety of antimitotic agents such as X ray, Colchicine, 6 aminonicotinamide, may cause cleft palates by interfering with shelf movement. Changes in the interrelation of shelf and tongue may lead to delay of shelf movement from the vertical to the horizontal plane. The variability in stage of shelf movement can be thought of as a continuously distributed variable, and the point beyond which they cannot meet represents a threshold separating normality from abnormality. In this sense cleft palate is a threshold character. To reduce the frequency of cleft palate in man it was suggested that efforts might be directed to learning how to promote early shelf closure, thus reducing the probability that the embryo will reach the threshold of abnormality. A better understanding is needed of the process of closure and the identification of specific environmental tetrogens. (Ashley)

Gier, R. E., and Fast, T. B., Median maxillary anterior alveolar cleft. *Oral Med. oral Path., 24,* 496–501, 1967.

Five cases of median maxillary anterior alveolar cleft have been presented. The bony cleft penetrates between the maxillary central incisors and extends through the alveolar process to the incisive foramen. There is no involvement of the lip. No other facial abnormalities exist. No etiologic factors can be determined and no family history of this cleft was found. (Berkowitz)

Gorlin, R. J., and Sedano, Heddie, Mandibulofacial dysostosis. *Modern Medicine, 36,* 148–149, 1968.

A thorough clinical description of the syndrome is described. The palate is high or cleft in more than 40% of the cases. (Berkowitz)

Graber, T. M., Chung, D. D. B., and Aoba, J. T., Dentofacial orthopedics versus orthodontics. *J. Amer. dent. Assoc., 75,* 1145–1166, 1967.

Heavy interrupted extraoral forces have been suggested by the authors in the correction of abnormal vertical and anteroposterior jaw relationships. The forces used are of the same magnitude as those employed in orthopedics for the correction of spinal and long bone deformities. Forces of 3–4 pounds are used over a period of several years, usually during periods of rapid growth. Those people interested in early maxillary orthopedics with cleft palate children will find this article helpful in its discussion of extraoral traction to correct abnormal jaw relationships. (Swoope)

Gramiak, R., Kelley, M. L., Jr., Gravina, R. F., Nasal pressure changes during swallowing. *Amer. J. Roentgenol, 99,* 562–576, 1967.

Nasal pressure curves during swallowing were recorded 1,219 times in 88 healthy subjects. Of these, 940 were satisfactory for analysis and could be grouped into four basic types. Statistical analysis revealed that: 1) variations in the characteristics of the bolus produced variations in the pressure and time of occurrence of events on the nasal pressure curve; 2) similar bolus characteristics evoked similar manometric and temporal responses; 3) larger volumes of bolus were associated with an increase in the duration of the initial positive deflection; and 4) longer nasal pressure complexes were recorded in the supine position. Nasal pressure curves contained landmarks subdividing the act

of deglutition into four functional phases: oral transport, pharyngeal transport, pharyngeal cleansing, and oropharyngeal relaxation. Alteration of the volume of the bolus and subject posture significantly changed the duration of oral transport, whereas the subsequent phases were unaffected by changes in size or consistency of the bolus or position of the subject. This is in agreement with the classical concept that Stage I (oral transport) is voluntary while Stage II (pharyngeal transport, pharyngeal cleansing, and oropharyngeal relaxation) is reflex in nature. (author's summary)

Grayston, J. T., Peng, J., and Lee, G. C. Y., Congenital abnormalities following gestational rubella in Chinese. *JAMA, 202,* 95–100, 1967.

In 1957–1958 there occurred an outbreak of rubella involving about 1,000,000 cases, after about 14 years without this disease on Taiwan (Formosa). One hundred seventeen pregnant women who developed rubella were identified during pregnancy and the results of these pregnancies were followed for 5 years. Of 35 women who developed rubella during the first trimester, 4 terminated in spontaneous abortion, 2 in stillbirth, and in three pregnancies there was neonatal death. Ten of the live-born children had congenital abnormalities. One of these died in the neonatal period. The child which died and one other had cleft palate defects. Congenital deafness was the most common finding in this study. Eye abnormalities including pigmentation in the retina and small punctate cataracts were also seen in five cases. Subnormal intelligence was demonstrated in four children, and heart anomalies were present in four instances. The risk of tragic outcome attributable to rubella in pregnant women in this study was about 25%. (Gregg)

Hecht, F. and Jarvinen, Judith M., Heritable dysmorphic syndrome with normal intelligence. *Pediatrics, 70,* 927–935, 1967.

Two families are described with a syndrome of multiple congenital anomalies including cleft lip and palate, lip pits, genital anomalies, popliteal webbing, and malformations of the extremities. In each family the mother and two of the children were affected. The syndrome was widely variable in expression within each family. This syndrome may therefore be inherited as a dominant trait. The responsible gene is probably autosomal, but X-linkage has not yet been excluded by the demonstration of male-to-male transmission. The frequency of this syndrome was determined in a large cleft lip and palate population, and no other persons with the syndrome were found, suggesting that this mutant gene is a relatively rare cause of cleft lip and palate. The intelligence of the affected individuals was within the normal range. Other features which have not been emphasized include: 1) low acetabular angles; 2) malformations of the perineum and buttocks; and 3) dermal ridge patterns which may extend over the dorsal surface of the toes as well as above the heels. *Addendum to abstract:* A report of an additional family with this syndrome is genetically informative. The family studied by E. Lewis (*Proc. Roy. Soc. Med., 41,* 864, 1948) contained a sister and brother with cleft palate and popliteal webbing (the sister also had "bilateral incomplete harelip"); their father had cleft lip and palate. The father-to-son transmission rules out X-linkage and establishes this syndrome as an autosomal dominant pheno-type. (authors' summary)

Hynes, W., Observations in pharyngoplasty. *Brit. J. Plastic Surg., 20,* 244–256, 1967.

The author has 20 years experience of pharyngoplasty by muscle transplantation, using the method described by him in 1950. He concludes that the results of

pharyngoplasty and other secondary cleft palate operations can only be assessed in the most general terms. The operation is described in detail. Adequate access is obtained only when the soft palate is not intact, this may mean dividing it as a first procedure. The flaps are taken from the LATERAL walls of the pharynx below the Eustachian cushions and contain full thickness of muscle down to the white pharyngeal fascia covering the carotid sheaths. The vertical flaps are then sutured into a transverse incision. The operation obliterates the lateral pharyngeal recesses, reduces all diameters of the oropharynx and provides on the posterior pharynx a muscle ridge which should move with the palate. Definitive assessment of the speech is made 9–12 months postoperatively. (Reid)

Jensen, J. K. and Melchior, J. C., Possible partial trisomy of a chromosome of the group 6-X-12 and familial translocation heterozygosity in a child with congenital abnormalities. *Developm. Med. child Neurol., 9,* 313–318, 1967.

This case report deals with a four day old boy with a birth-weight of 3,000 g. and a birth-length of 47 cm. Physical examination revealed a cleft of the hard palate, a broad flat nose and low set ears. The head circumference was 33 cm. There were congenital anomalies of all fingers and toes, both feet and hands were deformed and ectopically positioned. There was a ventricular septal defect with a right-to-left shunt and possible rudimentary left ventricle and left atrium. Eye examination was normal, radiological examination showed bilateral luxation of the hips and a broad open symphysis. Urography was normal. The child's condition deteriorated and he died at the age of six weeks. Chromosome studies were completed for the infant, parents, sister, a cousin, and an aunt and uncle on the father's side. All members of the family examined had a modal number of forty-six. The results disclosed chromosomal abnormalities in three members of the family. The father and sister were Translocation Heterozygotes in which a translocated piece of one of the C group is attached to one of the members of the D group. Since the component of genetic material for these two individuals is normal, both of them exhibit a normal phenotype. The child in question has the same C D Translocation and, in addition, he exhibits a partially trisomic for one of the C group chromosomes. (Davis)

Karfik, V., About the pneumatization of mastoid process in patients with congenital clefts of the lip and palate. *Žurnal ušnych, nosovych i gorlovych bloezněj, 1,* 65, 1966.

The author followed the structure of the mastoid process in children with clefts of the lip and palate. Using the method of Schüller, he examined 100 patients 5–13 years of age. A control group of 100 healthy children of the same age was examined. In 54% mastoid process was without pneumatization, in 28.5% the process was sclerotized, and in 11% both pneumatization and sclerotization were found. In only 6.5% the pneumatization was found to be normal. Structure of the mastoid process depended not only on the type of cleft and the age of the patient but also on the operation. In clefts of the lip only the processes were pneumatized. Till the age of 10 years there was a predominance of mastoid processes without pneumatization. Sclerosis was in connection with chronic otitis. It is evident that in cleft patients the process of pneumatization is disturbed. The author advocates the prevention, which he sees in early closure of the lip and palate, to ensure normal function of Eustachian tubes and breathing through the nose. The early treatment of otitis and infections of the upper respiratory tract is imperative. This paper shows the increasing interest of ear-

nose-throat specialists in cleft palate problems, and opens new views on their pathology. Their work might help to clear the question of the best time for treatment of clefts. (author's summary)

Lang, B. R., Modification of the palatal lift speech aid. *J. prosth. Dent., 17,* 620–626, 1967.

The palatal lift appliance has been suggested for correction of insufficient velopharyngeal closure due to neuromuscular problems. The appliance lifts the soft palate upward and backward to the approximate position the velum attains during speech and deglutition. The evaluation of the patient, construction of prosthesis, and evaluation of prosthesis are discussed in detail. (Swoope)

Lang, B. R., and Bruce, R. A., Presurgical maxillectomy prosthesis. *J. prosth. Dent., 17,* 613–619, 1967.

The need for construction of temporary appliances prior to surgery is emphasized. Purposes, principles, and clinical treatment are discussed in detail. The patient adjusts more rapidly both physiologically and psychologically following the operation. The maintenance of speech and ability to ingest food easily allows a much better postoperative recovery. (Swoope)

Loeb, W. J., and Smith, E. A., Airway obstruction in a newborn by redunculated pharyngeal dermoid. *Pediatrics, 40,* 20–23, 1967.

A newborn female developed respiratory difficulty within an hour of delivery due to a firm, mobile, rubbery, mass protruding into the oropharynx from a stalk which was attached to the posterior surface of the soft palate just anterior to the uvula. This was removed without incident and on histological examination showed findings compatible with a dermoid. A brief resume of the pertinent literature is presented. The serious potential of airway obstruction from this lesion is stressed. (Gregg)

Lynch, J. I., Perry, L. W., Takauwa, T., and Scott, L. P., Congenital heart disease and chondrocctodermal dyplasia. *Amer. J. dis. Child., 115,* 80–87, 1968.

Two cases are described, one being a Negro. The clinical features of this syndrome are chondroplasia, ectodermal defect involving hair, teeth and nails, polydactyly and frequently congenital heart disease. Although not found in these two cases, cleft lip and cleft palate are anomalies frequently encountered. (Berkowitz)

Maisels, D. O., The timing of the various operations required for complete alveolar clefts and their influence on facial growth. *Brit. J. plastic Surg., 20,* 231–243, 1967.

The author reviews the current concepts in facial development and cleft formation. The various surgical procedures are reviewed chronologically with a detailed description of their effects. Finally the aims and influence of early and presurgical orthopaedic treatment are described. The conclusion reached is that every baby with a complete alveolar cleft should have orthopaedic treatment begun within 48 hours of birth. Whilst this may subsequently prove to have been unnecessary in about 30% of cases, there is no way of predicting at birth which cases fall into this 30%. However, orthopaedic treatment cannot do harm and if nothing else it prevents the feeding problems. An attempt should be made to design the timing and nature of the operations with due regard to the normal growth and developmental pattern of the face. This desired result is most likely to be achieved by a team approach by surgeon and orthodontist. (Reid)

Mandell, F., Ogra, P. L., Horowitz, S. L., and Hirshorn, K., Oral-facial-digital syndrome in a chromosomally normal male. *Pediatrics, 40,* 63–68, 1967.

The cardinal features of orodigitofacial dysostosis include lobulated tongue, hypertrophied frenulae with cleft of the alveolar process laterally, clefts of the hard and soft palates, median pseudocleft of the upper lip, hypoplastic nasal cartilages, alopecia and seborrheic changes of the scalp, digital deformities, and mental retardation, but may also have associated frontal bossing, hypertelorism, trembling, absence of the mandibular lateral incisors, and central nervous system defects. Because of an apparent dominant lethal inheritance in males, the over 50 cases which are reported have occurred almost exclusively in females. A few cases having clinical features of this syndrome in males are in the literature but none had normal chromosome complements. The authors describe a case of oral-facial-digital syndrome in a male child with a normal chromosome complement of 46 and an XY sex chromosome constitution. The Y chromosome was longer than the other small acrocentric chromosomes and approached the size of chromosome 18 in length. The "long" Y is a normal variant of this chromosome. Karyotype analysis of the father showed 46 chromosomes and included an identical "long" Y. The authors feel that the "long" Y does not represent an anomaly and that it has no etiological relationship to the clinical findings. A resume of the literature and ideas relating to the etiology of this process are presented. The authors suggest that the survival of this child represents the extreme variability of expressivity in this syndrome. (Gregg)

Niswander, J. D. and Adams, M. S., Oral clefts in the American Indian. *Public Health Reports, 82,* 807–812, 1967.

The frequency of occurrence of cleft lip and palate is reported among American Indians born in Public Health Service hospitals from July 1963 to June 1966. The authors estimate that the 25,341 reported births include approximately one-half of the American Indians born during this period. The incidence of cleft lip with or without cleft palate, was 1.38 per 1000 live births; of cleft palate only was .59/1000. For the cleft lip with or without cleft palate group, the Indian frequency is between that of Japanese (2.13) and Caucasion (1.20) with Negroid (.27) considerably lower than the other three groups. The incidence of isolated cleft palate is shown to be almost identical for the Indians and Japanese (.59) and is almost twice that of the Caucasian and Negro groups. The authors report the maternal blood group, blood type, and degree of Indian ancestry, and point out a rather sizable amount of genetic admixture, primarily Caucasian in nature, present in the American Indian group studied. In light of the hypothesized genetic component of cleft lip with or without cleft palate complex, the observed similarity between Caucasians and American Indians seems to be compatible with a simple genetic model. The almost identical frequencies of isolated cleft palate in American Indians and Japanese are speculated as resulting from complex genetic predisposition. Random genetic drift is discussed as a probable cause of the unusually high frequencies of oral clefts reported in small isolated Indian populations. (Carruthers)

Nora, J. J., Nora, A. H., Sommerville, R. J., Hill, R. M., and McNamara, D. G., Maternal exposure to potential teratogens. *JAMA, 202,* 1065–1069, 1967.

A prospective study of 240 mothers observed until delivery reveals a high frequency of exposure to potential teratogens in the first trimester of pregnancy (mean exposure per mother, 3.7 potentially teratogenic agents). Although some exposures

are unavoidable, the great majority of these exposures, including radiation and drugs, would be considered readily avoidable. The mean experience in the first trimester was 3.1 drug exposures per mother, which emphasizes not only that drug exposures are common, but that they are frequently multiple. Drugs used by the mothers were most often obtained by prescription. The significance of the role of teratogens in human malformations is not clearly established. However, until adequate information is available, it is appropriate to emphasize the magnitude of drug and other potentially teratogenic exposures to pregnant women and to enlist the support of physicians in the reduction of this exposure. (authors' summary)

Pearn, J. H., Report of a new site specific cleft palate tetrogen. *Nature, 215* (5104), 980–981, 1967.

More than 10 chemical tetrogens are now known to produce cleft palate in various species of Rodentia. These are Acetylsalisylic acid, Sodium salicylate, Meclozine hydrochloride, Nicotine, Cortisone Acetate, Trypan Blue, Nitrogen Mustard, and Hypervitaminosis. Extract of Indigofera Spicata was used by the researcher. Oral administration produced cleft palate and somatic dwarfism. Indigofera Spicata is a palatable, hardy plant of high protein yield with potential for pasture improvement in infertile tropical countries. The plant is an efficient nitrogen-fixing legume. Its use has been limited because of undesirable side effects, observed clinically in cattle. These included abortion. The investigator found this extract of Indigofera to act on site specificity. The other tetrogens acted where cleft palate was but one facet of a generalized response. Very few clinical tetrogens act with sufficient site specificity to allow more sophisticated methods of investigation on a localized anatomical area. In 200 exposed embryos, no other physical defects were observed in autopsies, of which 60% had cleft palates. Both hard and soft palates were involved. (Goldenberg)

Posner, H. S., Graves, A., King, C. T. G., and Wilk, A., Experimental Alteration of the metabolism of chlorcyclizine and the incidence of cleft palate in rats. *J. Pharmacology and exper. Therapeutics, 155,* 494–505, 1967.

Pregnant rats receiving chlorcyclizine in dosages of 25–60 mg/kg produce fetuses with many malformations, including cleft palate, micrognathia and microstomia. The author's study was directed at determining the ratio of chlorcyclizine and its metabolite norchlorcyclizine, in fetal, placental and maternal tissues from 12–18 days of gestation and quantitating this to the incidence of cleft palate. Controlled alteration of this ratio was accomplished by the simultaneous administration of SKF 525A—an inhibitor of dimethylation reactions. The administration of chlorcyclizine, 60 mg/kg, from days 10 to 15 or days 12 to 15 of gestation resulted in a ratio of norchlorcyclizine to chlorcyclizine in the tissues exceeding 8:1. The incidence of cleft palate in this group was 94% and 84% respectively. When SKF 525A was administered simultaneously, the ratio was reversed in favor of chlorcyclizine, ranging from 2.2:1 to 2.9:1. The incidence of cleft palate in this group was 35–38%. When norchlorcyclizine was administered from the 12th to 15th day of gestation, the incidence of cleft palate in the fetuses was 89%. Simultaneous administration of SKF 525A was associated with a 100% incidence of cleft palate. No ratios of tissue concentration are reported for these groups. The authors suggest the following explanations: 1) chlorcyclizine is a weak or nonteratogenic species, the teratogenic effect being due to residual norchlorcyclizine; 2) chlorcyclizine is teratogenic but SKF 525A reduces its effect; or 3) teratogenesis is not due to either component but

to a minor extractable or bound component. (Weeks)

Shapiro, B. L., Gorlin, R. J., Redman, R. S., and Bruhl, H. H., The palate and Down's Syndrome. *New England J. Med., 276,* 1460–1463, 1967.

Since near the time of the first description of Down's Syndrome, abnormalities of the palate have been reported so consistently as being a characteristic finding in mongolism that they have been included in the cardinal signs of the condition. In previous studies, however, observations of the palate had been made subjectively. The authors studied 153 patients with Down's Syndrome by direct measurements of the height, length and width of their palates, and contrasted these with measurements of 1322 presumably normal subjects. Ages of both groups ranged from six months to adulthood. The "characteristic finding" of high palate in Down's Syndrome was not borne out by their data. Measurements showed palates in these patients not to be significantly higher than normal although they were clearly more narrow than normal. The narrowness with a normal height plus unusual cross-sectional shapes might give the appearance of a relatively high palate. Data also showed the palates to be so dramatically short in comparison to the normal subjects, that the two groups could be distinguished on the basis of this factor alone. (Barnes)

Singh, I., Savara, B., and Miller, Patricia, Interrelations of selected measurements of the face and body in pre-adolescent and adolescent girls. *Growth, 31,* 119–131, 1967.

Size relationships of selected face and body dimensions were examined at two-year intervals in a mixed longitudinal study of 33 girls from 6 to 14 years of age. Stepwise multiple regression analyses were used to analyze the data with dependent and independent variables at the same ages with 1) each face dimension as dependent and selected body dimensions as independent variables, and 2) each body dimension as dependent and all face dimensions as independent variables. For the age period studied no consistent proportionality or relationship between face and body is seen. Only mandibular length, and stature and calf bone width show any degree of consistent relationships to body and face measurements respectively. Stature, calf bone width, weight and body surface area appear to be the best indicators of face development. As a measure and an indicator of growth, body surface area merits further investigation. The inconsistencies in interrelations during this age period could reflect sample limitations, adolescent variability in growth and/or the fact that certain a priori propositions of growth, tested herein, are not completely valid. (authors' summary: Mason)

Smith, R. M., and McWilliams, Betty, Psycholinguistic considerations in the management of children with cleft palate. *J. speech hearing Dis. 33,* 26–33, 1968.

The Illinois Test of Psycholinguistic Abilities (ITPA) was administered to 136 children with various types of cleft conditions between the ages of three years and eight years, eleven months. At each age interval sampled, the subjects demonstrated a deficit in each of nine language areas evaluated by the ITPA. Also, weaknesses in vocal and gestural expression and visual memory were identified in relation to subject performances in other linguistic functions assessed. There was a tendency for subject performance to become poorer as ages of subjects increased. The results of this study suggest the need for differential diagnosis of cleft children and for programs in expressive language activities for young cleft palate children irrespective

of articulation ability or voice quality status. (Mason)

Vallance-Owen, J., Braithwaite, F., Wilson, J. S. P., Edwards, J. R. C., and Maurice, D. G., Cleft lip and palate deformities and insulin antagonism. *Lancet, 2,* 912–914, 1967.

An investigation was made on unselected nondiabetic mothers who had given birth to children with cleft lip and palate deformities, of the insulin antagonistic activity of plasma albumin. Increased antagonism to insulin associated with their plasma albumin is found in essential diabetics, including prediabetics. It is well-known that there is an association of major congenital anomalies with maternal diabetes. It was found that in those mothers with children with cleft lip and palate deformities, there was a significant increase in antagonism to insulin associated with plasma albumin. This suggests that many women who bear children with congenital anomalies of face are constituted as diabetic though only occasionally showing carbohydrate intolerance. (Babcock)

Ward, P. H., Stoudt, R., and Goldman, R., Improvement of velopharyngeal insufficiency by Teflon injection. *Trans. Amer. Acad. Ophthal. Otolaryngol., 71,* 923–933, 1967.

The theory behind the use of an injectible material into the posterior pharyngeal space to provide closure, a discussion of techniques for this injection, and a resume of the pharmacology and biological behavior of Teflon, has been presented by the authors. Because their experience with this technique is limited, the authors feel that the application of injection of Teflon-glycerine paste in the management of palate deficiency problems remains to be determined. If the long-term results using this method of injection of the posterior pharyngeal wall for velopharyngeal insufficiency bear out the early promising results, it may provide a simple, rapid and effective means of managing velopharyngeal incompetence. (Gregg)

Wertz, R. A., Changes in nasal airflow incident to rapid maxillary expansion. *Angle Orthod., 38,* 1–11, 1968.

A method of measuring nasal airflow is demonstrated during inspiration and exhalation. The method utilized the warm-wire anemometer principle which measures air velocity in feet per minute. An orthodontic fixed split palate appliance was used on two groups of patients. Upper first molars and first bicuspid bands are made to which heavy stainless steel wires (.045) are soldered. The ends of the wires are then embedded in an Acrylic plate. The midline of the Acrylic plate is divided where an expansion screw connects the two halves. The bands and appliance are then cemented in place. The patient can control the opening of the expansion screw, one half turn each morning and night for eleven to eighteen days. At this time, cold cure acrylic is added and the two halves of the plate are united, and maintained for three months. The midpalatal suture is opened, and the maxilla is expanded for as much as ten millimeters. Other investigators claimed an increase in nasal width thereby freeing the nasal chambers and permitting freedom in breathing, aiding mouth breathers to breathe more normally. Orthodontically, the appliance is a dramatic, rapid utility for expansion of maxillary segments where arch width deficiency exists. The investigator found no justification for this appliance solely for increasing nasal permeability, unless the obstruction is shown to be in the lower anterior portion of the nasal cavity and accompanied by bilateral maxillary arch width deficiency. (Goldenberg)

Zarb, G. A., Maxillary resection and its prosthetic replacement. *J. prosth. Dent. 18,* 268–281, 1967.

A detailed description of the resected maxilla is presented. The surgical procedure is performed on a cadaver and well documented with photographs and diagrams. The anatomy involved is described in detail to provide a better understanding of the defect. Prosthetic treatment is described, including immediate placement of temporary appliances, construction of permanent obturators, and long-term maintenance. (Swoope)

LETTERS TO THE EDITOR

Dear Editor:

I would like to call your attention to an error which appeared in the paper by Bluestone and McWilliams, January 1968 *CPJ*, 19–22, entitled "Teflon injection pharyngoplasty". On page 21, the Taub Panendoscope is referred to as being manufactured by the American Cystoscope Makers, Pelham Manor, New York. This is incorrect. The manufacturer of the instrument is National Electric Instrument Division, Engelhard-Hanovia, Elmhurst, New York. I think a better reference would have been: "The Taub Oral Panendoscope, A New Technique", *Cleft Palate Journal*, October 1966.

I hope that this error can be corrected in subsequent reprints and noted in your next publication.

Stanley Taub, M.D.
77 Park Avenue
New York, New York 10016

NECROLOGY

JOHN K. GROTTING: February 8, 1968
EDWIN NORMAN RISE: March 19, 1968

ANNOUNCEMENTS

The Association continues to have problems in financing the publication of *CPJ*. Just recently, for example, manufacturing costs increased 5%. Several steps are being taken in an effort to solve the problems.

a) Beginning immediately, the subscription rate for *CPJ* will be $15.00 the volume, $4.00 the issue. Note that this increase does *not* affect members of ACPA.

b) Beginning with the January 1969 issue of *CPJ*, a per page cost will be assessed to the author for printed pages in excess of eight per manuscript. (For example, if, in printed form, an article is ten pages in length, en toto, page costs will be assessed for two pages.) Other kinds of manufacturing costs, such as for tabular material or for figures, will *not* be assessed. The exact amount of page costs has not yet been established.

c) Additional efforts will be made to solicit advertising in *CPJ*. An Advertising Board has been established: Charles R. Elliott, Ph.D.; Maxine Schurter, M.D.; and Haskell Gruber, D.D.S. The Board will be responsible for developing policy and procedure for the placement of advertising in *CPJ*. Members interested in participating in this activity should contact any member of the Board.

Cleft Palate Team Listings... Material is now being collected for the listing of cleft palate teams to be published in the 1968–1969 ACPA *Directory*. Teams which meet the criteria presented below may be listed in the *Directory* upon formal request to the Secretary (Dr. Kenneth R. Bzoch). See page 95 of the 1967–1968 *Directory* for format of the listings.

Criteria:

a) each team must have representation from at least the fields of dentistry, speech pathology, and plastic surgery

b) each team must have at least one member on the staff who is a member of ACPA

Notice: Listing in the ACPA *Directory* does in no way imply endorsement of the team by the American Cleft Palate Association.

The Editorial staff of *CPJ* and the Executive Council of ACPA are currently evaluating the usefulness of the sections on abstracts published routinely in *CPJ*. We need help from the readers. Please comment, at your earliest convenience, to Dr. Douglas Noll, Dr. Michael Lewis, or to

the Editor about your use of the abstracts. Some questions that we have are: Do you read the abstracts? Do you find them useful? How are they useful? Could they be shorter in length and still be useful? Other kinds of comments will be helpful to us, too.

The Book Review Editor needs someone who can translate Polish. If that ability is among your skills, write Dr. Betty J. McWilliams, Ph.D., Cleft Palate Research Center, 355 Salk Hall, University of Pittsburgh, Pittsburgh, Pennsylvania 15213.

The Board of Trustees of the University of Illinois has approved the recommendation of the Chancellor at the Medical Center that the name of the Cleft Palate Center and Training Program be changed to the Center for Craniofacial Anomalies, effective immediately. The reorganization of the Center was designed to enhance its contribution to the teaching, research, and patient care services of the Medical Center Campus. The Center for Craniofacial Anomalies now includes the Cleft Palate Clinic, Maxillofacial Prosthetic Clinic, The Laboratory for Developmental Pathology, and the Growth Laboratory at the Illinois State Pediatric Institute. Additional clinics and laboratories are being planned. The new Center will be administered primarily through the Office of the Dean of the College of Dentistry. However, the Center will continue to be responsible for the clinical portion of its activities to the Medical Director of the Research and Educational Hospitals. The Advisory Committee to the Center will be drawn from the several colleges of the University. Dr. Samuel Pruzansky, Professor of Dentistry and presently in charge of the Cleft Palate Unit, will serve as Director of the Center for Craniofacial Anomalies.

The Mayo Graduate School of Medicine and the Section of Dentistry and Oral Surgery of the Mayo Clinic offer a graduate-residency training program in prosthodontics leading to a Master of Science Degree in Dentistry or Certificate of Achievement. Appointments for the 36 month course of study in conventional and maxillofacial prosthodontics are made once a year beginning with the summer or fall quarter. Didactic courses, clinical and laboratory experience, and practice teaching satisfy requirements for certification by the American Board of Prosthodontics. A stipend is provided with annual increments. Address inquires to Director, Mayo Graduate School of Medicine, 200 First Street Southwest, Rochester, Minnesota 55902.

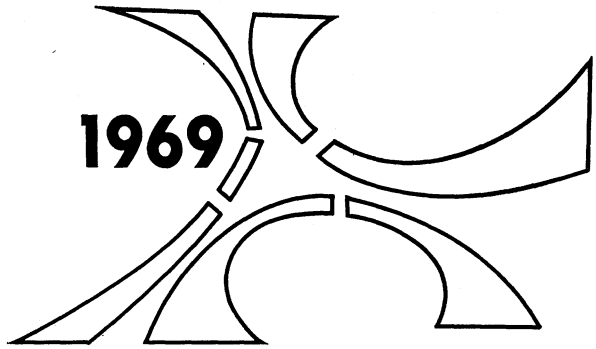
TIME AND PLACE, ACPA

1969—International Congress, April 14, 15, 16, 17.....
Houston at the Shamrock
1970—April 16, 17, 18.....Portland at the Hilton
1971—April 22, 23, 24.....Pittsburgh at Chatham Center
1972—May 18, 19, 20.....Pittsburgh at Chatham Center
1973—date unspecified.....Oklahoma City

ERRATUM

By error, the name of Morton S. Rosen, D.D.S., was omitted from the listing of the Program Committee of the Association, 1967–1968. Our apologies to Dr. Rosen.

About the 1969 International Congress on Cleft Palate



The plans for the Congress are moving steadily forward, following working sessions of the Secretariat at the last Annual Meeting of the Association in Miami. You have already received the first call for papers, scientific exhibits, and films. I hope you have or are planning to respond to the calls.

As of this writing we have received expressions of interest from approximately 2800 persons (other than ACPA members) who wish to receive information about the Congress. We know that not all of these persons will be able to come to the Congress but we want to do everything possible to encourage our non-American friends to come. You can help by obtaining an allocation of local funds for an honorarium for one or more of them to make it possible to visit your institution before or after the Congress to give a lecture or to consult. If you are able to obtain the funds, please contact Dr. Betty Jane McWilliams, who will provide you with the names of foreign visitors who are interested in lecturing or consulting. You then make your contacts directly with the visitors of your choice and work out the arrangements for the visit. But you must act no later than September 1 to insure that your offer will have the desired impact.

You have also now received information about the commercial exhibits and the Congress guide. Your help is urgently needed to make both ventures financial successes, thereby helping the Association develop some programs which it cannot now afford. Remember, if you have a personal contact with someone in a commercial organization that might be induced to buy commercial exhibit space, contact the Chairman of the Subcommittee on Commercial Exhibits, American Cleft Palate Association (Robert F. Sloan, 1917 Roscomore Road, Los Angeles, California 90024). You can expect an immediate response from your inquiry, providing you with the necessary instructions. If you consider timing to be an urgent factor, call Bob Sloan at 213-476-2455.

We also need your help in selling space in the Congress Guide. This

space is available to commercial houses, educational institutions and individuals. Prices range from $10 for a donor or patron insert to $50 for a full-page of material. How about you? Your institution? Commercial houses that you know about? This request is directed to each member of the Association. Please don't shrug it off. It is your opportunity to participate in a very important way in making the Congress a success. If you have misplaced the material on the commercial exhibits and Congress Guide which we sent you a few weeks ago, please contact the Chairman of the Subcommittee at the above address and ask for another set.

We feel the plans for the nonscientific aspects of the Congress are exciting. There will be color and a bit of pageantry, provided by flying the flags of all countries represented, the opening ceremony of the Congress, and by the performance by a mounted sheriff's posse in front of the hotel. There will be a barbecue, entertainment, and dancing at a ranch. There will be a tour of the Astrodome and the Astroworld. There will be special activities for the wives. And more.

It is our intention to make this Congress a landmark in every way—quite in keeping with the standards of the Association and the traditions of Texas!

D. C. Spriestersbach
Secretary-General
Old Capitol
Iowa City, Iowa 52240

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Joanne D. Subtelny, Ph.D. (1969), Rochester, New York

Correspondence pertaining to the Association should be addressed to the Secretary: Dr. Kenneth R. Bzoch, Department of Communicative Disorders, College of Health Related Professions, University of Florida, Gainesville, Florida 32601.

Changes of address and subscriptions to the Cleft Palate Journal *should be addressed to the Treasurer: Dr. Howard Aduss, 808 S. Wood Street, Chicago, Illinois 60080*

Manuscripts and related correspondence should be addressed to the Editor: Dr. Hughlett L. Morris, Department of Otolaryngology, University Hospitals, Iowa City, Iowa 52240.

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1967–1968

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Robert F. Sloan, Ph.D.

AMERICAN CLEFT PALATE ASSOCIATION

Information for Applying for Membership

The Association was organized in 1940 with the following objectives:

1. To encourage scientific research in the causes of cleft lip and palate.
2. To promote the science and art of rehabilitation of persons with cleft palate and associated deformities.
3. To encourage cooperation among, and stimulation of, those specialists interested in the rehabilitation of cleft palate persons.
4. To stimulate public interest in, and support of, the rehabilitation of cleft palate persons.

The Association publishes the *Cleft Palate Journal* quarterly. The Association's Annual Meeting includes sessions devoted to the presentation of papers in medicine, dentistry, speech, and related areas concerning the problems in individuals with cleft lips and palates.

Membership. To be qualified as a member of the Association, the applicant must be in good standing in the professional organization representing his major or clinical accreditation. He must be accredited in his professional field, and have displayed an interest in the rehabilitation of cleft palate persons. In the fields of plastic surgery and orthodontia, this requirement has been interpreted to mean board accreditation or board eligibility in the appropriate organization. In speech pathology it requires the Certificate of Clinical Competence from the American Speech and Hearing Association. If the applicant's primary work is research, he must hold the doctorate degree. Applicants from other specialities are evaluated with similar criteria. In addition, the applicant must be sponsored by a member in good standing of the Association, who must write a letter attesting to the fact that the applicant is eligible for membership.

Corresponding Membership. Corresponding Membership may be granted to professional persons whose professional interest is consistent with the goals of the ACPA and who are members in good standing in their professional societies, but cannot qualify for full memberhip because of circumstances related to their geographic location. Such members will pay full dues, receive all publications of the Association, and be eligible to serve on committees. They will not be allowed to vote or to hold office. Processing of applications is handled in the same way as applications for full membership.

Associate Membership. Associate membership may be granted to persons whose professional interests are consistent with the goals of the Association, who have displayed an interest in the study or treatment of cleft palate, and who are in good standing in their professional organization representing their major or clinical orientation, but who cannot qualify for full membership because of circumstances related to accreditation requirements. Associate members will pay full dues, receive all publications of the Association, and be eligible to serve on committees. They will not be allowed to vote, hold office or chair committees. When an Associate member meets requirements for full membership, he may petition to have his membership status changed.

Send applications or requests for further information to:

DR. GARY R. SMILEY
Chairman for Membership
American Cleft Palate Association
Department of Orthodontics, School of Dentistry
University of North Carolina
Chapel Hill, North Carolina 27514