

BOOK REVIEWS

LEVIN, NATHANIEL M. (Ed.), *Voice and Speech Disorders: Medical Aspects*. Springfield, Illinois: Charles C Thomas, 1962. Pp. 966. \$27.50.

The scope of this large volume goes beyond that suggested by its subtitle to include such essentially non-medical subjects as the disorder of stuttering and the programming of speech therapy in schools and community clinics. Thirty-four authors in addition to the editor have contributed 39 separate treatments organized into four main divisions: Basic Mechanisms of Voice and Speech, Otology and Audiology, Pathology and Therapy of Voice and Speech, and Habilitation and Rehabilitation. Six of these treatments pertaining to cleft lip and palate and other maxillofacial and oropharyngeal problems are here reviewed.

The discussions are unfortunately disjointed and their coverage uneven. Most satisfactory are Chapter 20, a treatment by five Miami dentists (Balber, Coret, Litowitz, Rosenthal, and Seitlin) of normal dental occlusion and temporo-mandibular joint function, orthodontic considerations, and prosthetic management of cleft palate, and Chapter 21 (I), a discussion by R. B. Stark of embryology, etiology, and pathogenesis of cleft lip and palate. Dr. Stark deviates from the 'classic' doctrine of lip-palate pathogenesis—failure of fusion—suggesting that cleft lip and cleft palate are different entities pathogenetically.

Chapter 21 (II) by Stark and C. C. Snyder (General and Surgical Aspects) is oddly incomplete and dotted with questionable and contradictory statements. Some examples: The opinion is stated (p. 766) that 'if the aperture between the soft palate and the posterior pharyngeal wall does not exceed 6 mm., the speech is not affected,' but the next sentence contradicts it; other statements reflecting varying degrees of positiveness appear on pages 774, 776, and 781, including one that 'air tight closure of the nasopharyngeal area is essential for perfect speech' (p. 776). The problem of tonsilloadenoidectomy in cleft palate is not clearly dealt with, especially the role of adenoids in velopharyngeal closure. This crucial subject of closure is handled without reference to recent research. The ridge of Passavant is described as consistently playing an important role in normal and pathological speech mechanisms. We are told that 'swallowing is greatly affected' (p. 776) in cleft palate, but we are not told how, why, what to do about it, or the source of the information. Such an important surgical procedure as the pharyngeal flap is not discussed in the text (though an illustration on page 784 pictures it). And so it goes: the reader emerges puzzled and disappointed.

Phair's chapter 21 (III) on speech therapy in cleft palate lists manage-

ment activities that are useful. But the low-gearred discussion lacks incisive analysis and precise description of what is going on and what the speech pathologist should do. For example, it speaks vaguely of 'lack of explosive power,' failing to specify the essential relationships, revealed by substantial published research, existing between velopharyngeal closure, intraoral breath pressure, and articulation. One is not told how to use the special tools now available to study these parameters; in fact discussion of speech evaluation is sketchy and emphasis is on speech therapy based on the assumption 'that there has been an adequate lip and palate repair by surgery or prosthesis.'

Finally Parts I and II of Chapter 22 deal with the surgery (as done at Miami's Jackson Memorial Hospital and as illustrated by four cases) and the speech problems associated with maxillofacial and oropharyngeal pathology, which are described as automatically accommodated to by the usual patient.

With different people handling related subjects in separate chapters and without the exercise of firm editorial discipline, there results a failure of integration of the material. Nor is there discussion of issues that concern the rehabilitation team as a whole such as criteria for choice of management procedures, relative values and limitations of surgical and prosthetic approaches to various problems, how they may best supplement each other in a well-timed sequence, etc.

There are unfortunate mechanical faults—paper too glossy, typographical errors, incomplete references, inadequate legends for illustrations—which may bother the reader. But more basic problems are that the portion of the book reviewed sacrifices depth for breadth and is so poorly knit together that it is self-contradictory and repetitious. It will unfortunately satisfy neither the specialist nor the beginning student.

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GELBKE, HEINZ, *Weiderherstellende und Plastische Chirurgie* (Reconstructive and Plastic Surgery). Vol. III, Head and Neck, text in German, Stuttgart, Germany: Georg Thieme Verlag, 1964. Pp. 320. DM 130.00.

This is the third volume in a trilogy on reconstructive and plastic surgery. Apparently Volume I has a general section dealing with the pathophysiology and technique of modern anesthesia and with reconstructive surgery of the upper and lower extremities, while Volume II is devoted to the torso, the urogenital, and anal regions.

The volume under review is entirely devoted to reconstructive surgery of the head and neck and is beautifully illustrated with line drawings as well as with a profusion of pre- and post-operative photographs. On the

whole, however, the reviewer found this volume rather disappointing. Judging by the post-operative photographic results, the standard of work is certainly far behind the quality of reconstructive surgery as practiced in the United States as well as in the United Kingdom. For a book which was published as recently as 1964 and which contains numerous references to contemporary American publications, some of the operative approaches are far behind and seem rather crude as compared with the techniques which are available nowadays. Furthermore, the subject matter is not sufficiently covered. In the section on cleft palate, the subject of feeding and pre-operative orthodontics is entirely ignored. The author advocates that cleft palate repair be carried out at four or five years of age; the reviewer has difficulty in accepting the reasons stated for delaying the operation that long. Although the illustrator's artistic skill is on a high level, gross inaccuracies were allowed into print. The diagrams illustrating the cleft palate repair show adult dentition, and the unilateral cleft is shown as a midline defect passing between the central incisors. The repair of the cleft consists of a two-layer closure—one row of sutures joins the vomerine to the nasal mucosa and the second row approximates the oral flaps. A single mattress suture supports the soft palate repair, and the muscle layer is not individually approximated. The repair of fistulae following upon cleft palate repair, however, is well presented. Cases of velopharyngeal incompetence are treated by the Hynes pharyngoplasty which is at times done simultaneously with the repair of the cleft palate. Where the Hynes operation fails, the condition is corrected with the Schönborn-Rosenthal inferiorly-based pharyngeal flap.

Only one technique is discussed for the repair of all cleft lips and that is the method which was described by LeMesurier. Invariably the author combines this with a repair of the nasal alae through an external V-shaped tip incision. Secondary repair problems of the lip are once again treated fairly well, although the reviewer cannot condone the widespread and almost invariable use of external nasal incisions as a standard approach to the alar cartilages. On the other hand, credit must be given to the section dealing with the reconstructive procedures of the lips resulting from trauma or from treatment for neoplastic lesions. On the whole this is rather well done with excellent cosmetic results and seems to be in a class well above the other sections in this volume. However, a safer and more cosmetic skin incision is available than that of approaching the mandible through an incision immediately overlying its inferior border. One must deplore the author's rather frequent resort to inflicting unsightly and unnecessary external nasal scars where excellent results may be obtained through conventionally accepted intranasal incisions, however difficult the latter may seem. Indeed, the reviewer finds it very puzzling that Jacques Joseph, the universally accepted 'father' of modern rhinoplasty (who, incidentally, was expelled from

Germany because of 'non-Aryan' origins), is not even mentioned in this volume under review. True, Joseph's books were burned by the German Nazis, but to show complete ignorance of his basic teachings—principles which are accepted by every rhinoplastic surgeon—seems very strange indeed. Because of this, one is all the more surprised to find this author applying Joseph's techniques, with minor modifications, to cosmetic rhinoplasty and particularly when his diagrams show the instruments which Joseph had originally designed and still bear his name to date. Surely, credit to Joseph is more than justified.

The remaining sections dealing with the eyes and scalp are quite satisfactory. The otoplasty operation is based on Luckett's method, although it does not improve upon it. Fractures of the nose and facial bone are not dealt with at all.

In summary, the reviewer finds himself unable to recommend this book, although some of its aspects are dealt with rather well. By comparing the diagrams in this book which illustrate the cosmetic rhinoplasty operations with the diagrams originally published by Converse, it becomes very obvious that Professor Ehmke has been having free access to modern American medical literature, and this makes one wonder all the more at the inconsistent quality of the work presented in this book.

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STARK, RICHARD B., *Plastic Surgery*, New York, N.Y.: Harper & Row, Publishers, 1962. Pp. 718. \$28.50.

Twenty years of personal research, teaching, and experience in the field of plastic surgery, and hundreds of years of contributions of others in this field are summarized in this text. His proclaimed purpose in preparing this volume was to offer a reference work providing the rationale and adequate historical background of many technical procedures for residents training in plastic surgery, for practicing plastic surgeons as an aid in planning conference discussion and lectures, and for general surgeons unable to consult immediately with specialists in plastic surgery. Doctor Stark is known to many of us in the American Cleft Palate Association as an early and active member contributing importantly to the scientific worth of our programs from year to year. He is eminently qualified to seek his stated goals.

The first six chapters cover general aspects of subjects important in the field of plastic surgery. Wound healing, anesthesia techniques and selection, dressing and splinting devices, fundamental reconstructive surgical tools and techniques applicable in many parts of the body, free transplants, pedicle flaps, and the skin as it relates to the surgeon are discussed. He is assisted in the 70 pages devoted to the skin by contribu-

tions from J. Frederick Eagle and Clayton R. DeHaan covering fluid and electrolyte therapy and surgical treatment of burned patients.

Chapters 7 through 19 cover each of the anatomical areas of interest in plastic surgery, beginning with the scalp and skull and going down to the lower extremity. Chapter 20 is devoted to research, with excellent summaries of subjects of particular interest to the author, including homotransplantation, experimental tetology, and scar proliferation.

More than in most works on plastic surgery, embryology is stressed. The author believes that '... a surgeon will more artfully correct cleft lip for example, if he knows how the normal lip develops, just as he can better correct malrotation of the gut if he first understands its normal rotation.' This reviewer agrees that the emphasis on embryology considerably strengthens the later discussions relating to pathology and treatment of abnormalities in various parts of the body.

Of particular interest to workers in the cleft lip and cleft palate field are Chapter 12 on the nose, Chapter 13 on the oral cavity, and Chapter 14 on the lips and chin. In the first of these chapters, one of the clearest depictions of cosmetic rhinoplasty ever seen by this reviewer is presented. An entire section appears on cleft nasal tips and on the cleft-lip nostril. Missing, however, are illustrations showing the correction of nasal deformities accompanying unilateral cleft lip.

In Chapter 13, devoted to the oral cavity, the palate is discussed. An excellent section on the history of cleft palate treatment makes up part of this presentation. From the tremendous number of procedures, the author has selected for detailed illustration three main techniques: the Dieffenbach-Warren procedure, palatoplasty with primary pharyngeal flap, and palate lengthening by W-V retroposition. For secondary surgery, an operation is shown in which a rather narrow, orally-based pharyngeal flap is attached to the soft palate. Dental and orthodontic treatment, hearing and speech evaluations, and the team approach are discussed as being related to surgical treatment.

In Chapter 14 the author sets forth his thinking as applied to lip embryology, but not to the exclusion of other points of view. The most important variations on the theme of cleft lip repair are described and comparisons are made between them. The new classification of cleft lip deformities proposed by Kernahan and Stark is compared with older systems of classifying these abnormalities. Median clefts, bilateral clefts, and unilateral clefts are all discussed and a good but brief section on secondary surgery is provided.

The reviewer is certain that many workers in the cleft lip and cleft palate field will disagree with certain selections of techniques or with some statements made by the author. However, in the by and large, these disagreements would be made on the basis of personal preference. For example, the reviewer uses much wider pharyngeal flaps than those shown in this text and makes no attempt to close the flap donor area in

most cases. On the other hand, the reviewer would not advance the argument that Stark's flaps do not give his patients good speech, or that closure of the flap donor sites should not be attempted.

In a text of some 700 pages describing a field as dynamic as plastic surgery, one might expect to find some real errors or points of contention. In this work they are rare indeed. The author states, "... with the pronunciation of such sounds as 'EE' and plosive words such as 'good' or 'church', the bilateral levators contract to their maximum, producing a papilla on the nasal side and a dimple on the oral side of the velum." It is perhaps nit-picking to point out that a prolonged, nasally emitted 'EE' is not made with the levators contracted to their maximum, but the author's statement goes along with the tendency on the parts of some investigators to use lateral x-rays of patients making a sustained 'EE' sound as a test of the ability of the patient to elevate the palate to its maximum and therefore should be questioned.

Minor criticisms aside, this is a fine book. Daisy Stilwell's illustrations are beautifully done; Doctor Stark's photographs are honest, clear, and are picked to make the points he wishes to make. From beginning to end, a fine surgeon's interest in basic principles is emphasized, a self-disciplined research worker's inquisitiveness is shown, and a creative teacher's selection from the complex and synthesis to the simple is provided for the reader. The reviewer feels that Doctor Stark has been entirely successful in achieving the goals he set for himself in writing this text.

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BOHN, ARNE, *Dental Anomalies in Harelip and Cleft Palate*. Oslo, Norway: Universitetsforlaget, Scandinavian University Books, 1963. Pp. 104. \$5.00.

This book contains two excellent and detailed studies on abnormal dental conditions in patients with various types of facial clefts. One of these studies deals with the variations in the number of teeth inside and outside the cleft area while the other is more concerned with the variations in the shape and size of teeth in the area adjacent to the cleft. In the former the author reports the incidence of the numerical variants in the cleft area in both dentitions and attempts to correlate them to type or degree of cleft, facial side, and sex. The intention of the author in the latter is to collect complete data on the various types of fissural teeth in both dentitions. Specific information is also reported on the status of the central incisor and the canine tooth in cases of cleft lip, cleft palate, and cleft lip and palate.

Three hundred thirty-nine patients were included for study. Patients were categorized according to the type of cleft they exhibited; however,

of particular interest was the defect through the alveolar process in the area of the lateral incisor. The author used the following classification for grouping his subjects: a) clefts in the primary palate included cleft lip only and cleft lip and alveolar process, b) clefts in the secondary palate which involved the hard and soft palates to varying degrees (the isolated or posterior cleft palate), and c) clefts involving the lip and the palate which were either unilateral or bilateral.

Some of the more important findings worthy of inclusion in this report are as follows:

In the cleft lip population without any associated involvement of the alveolar process, it was noted that agenesis was observed only in the secondary dentition and then only 10% of the cases. Contrast this to the finding of agenesis in the cleft area of the group with involvement of lip and alveolar process where it was found to occur in 14.3% of the cases in the primary dentition and in 45.5% of the cases in the secondary dentition.

Another interesting finding is one on hypodontia outside the cleft area in the secondary dentition. The author found that in those children with a cleft of the lip or of the lip and alveolar process, absence of permanent teeth outside the cleft area occurred in 4.5% of the cases, or approximately as in normal cases. In the group that had a cleft lip and palate hypodontia was found to occur in 42.6% of the cases—much more frequently than in normal cases. The tooth most frequently found missing was the maxillary second bicuspid. The number of missing teeth was higher in bilateral than in unilateral cases and more teeth were found missing in the upper than in the lower jaw.

By comparison to the cleft lip and/or palate group the posterior cleft palate sample showed that hypodontia was evident in 32.3% of the cases—much greater than that observed for the normal group.

The group of subjects with a cleft lip and alveolar process with or without involvement of the secondary palate were examined with reference to the incidence of dental malformations (fissural teeth). Such teeth were found to occur instead of the maxillary lateral incisors in the cleft area. A fissural tooth developed more often on the distal side of the cleft usually medial or lingual to the canine. It was observed to occur in 75.6% of the cases in the primary dentition compared to 44.3% in the secondary dentition.

Both medial and distal fissural teeth were present more often in the primary than in the secondary dentition. The number of fissural teeth usually increases with increasing size of cleft.

Hypodontia was found in 32.3% of the cases with a posterior cleft palate, significantly more often than in the normal. In this group the tooth most frequently missing was the lower second bicuspid.

These are just a few of some of the more interesting findings that are found in this book, covering a very fascinating aspect of the cleft palate problem. There are many tables and graphs throughout the text detailing the specific data from which the results were obtained.

Although the text is well written and the material properly organized, it is filled with many designations for the clefts and teeth which appear quite often throughout the text. Such designations compel the reader to refer constantly to the list of abbreviations to keep him properly informed about the material he is reading.

Readers may need to take a little time to adjust to the terminology and designations employed throughout the text; however, this book will prove to be of real interest to all those in the field of cleft palate, particularly to the orthodontists, oral surgeons, and plastic surgeons who are many times directly involved in the areas in question.

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ABSTRACTS

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Bloch, P., Foniatria nas fissuras palatinas. *J. Brasileiro Medicina*, 8, 427-432, 1964.

The author studies the problems of the voice and speech in patients with cleft palate. He stresses the importance of the environment, the embryonic aspects, and the voice, speech, and hearing defects in the pre- and postoperative steps. He analyzes the measurement of nasality and the velopharyngeal closure. In relation to the phoniatric re-education, the author names the Perelló classification, saying that the objective of the rehabilitation is to let the patient change from one group

to the other. In his work the author insists on the right handling of the psychological problem that always accompanies these patients. (Morgante)

Giardini, C., Rilke, F., Okely, C. Marino, V., Schisi labio-palatine e malformazioni associate: studio di 23 casi autoptici (Cleft palate, hare lip and associated malformations: a study on 23 autopsic cases). *Felia hered. Pathol.*, 13, 331-344, 1963.

After having pointed out the importance of the anomalies of the face and oral cavity from the embryological, patho-

anatomical, and surgical point of view, the authors briefly outline the most reliable theories (vascular, nervous, and embryological hypotheses) which are generally proposed to explain the 'genesis formalis' of cleft palate and cleft lip. The authors consider themselves in agreement with Rosselli, in light of mutual integration which thereby explains the complicated embryogenetical defects of development during the early embryological stages. In particular they call attention to the importance of the frequent association of cleft palate and cleft lip with various malformations pertaining to the cephalic area or other sites, so that the dysmorphoses under review may be identified with syndromes already mentioned in literature or, more often, coexisting with malformations which are little known and difficult to classify. Next, the authors refer to their study of a very rare and valuable autopsic material. Out of the 33 cases observed as many as 23 or 70% (12 males and 11 females) show anomalies affecting several organs and apparatuses such as the cardiovascular, skeletal, and urogenital apparatuses, and the nervous system. The authors, in order to explain such a great number of coexistent lesions, suggest that the teratogenous noxa, responsible for such associated plurimalformations, may also have acted contemporarily on all rudiments, which, in the aforesaid critical embryonic periods, are particularly sensitive both to exogenous and endogenous perturbations because of their enormous capacity of growth. This paper, dealing with the result of an appreciable patho-anatomical study and accompanied by valuable illustrations of the most demonstrative material, seems most noteworthy. It is noteworthy because of the remarkable interest that it excites, not only because of the exhaustive patho-anatomical description, but also because, on the ground of keen personal observations, it suggests certain

aethiopathogenetic interpretations which deserve the highest credit. (Francesconi)

Podkolzin, V. A., Deformation of the upper lip and nose following the operative treatment of congenital harelip and its elimination. *Stomatologia*, 43, 62-66, 1964.

This article is a review of the corrective operations for the cleft lip and nose deformations according to the methods of CITO (Central Institut of Traumatologie and Orthopedie). The operations are based on the methods of Rauer and Chitrov and they deal with the uncovering of the deformed tip cartilages which are isolated by an intranasal or a swallow-shape incision on the columella and the ala of the nose, mobilized, and fixated in the new correct position. The method of Chitrov can be considered with certainty as physiologic, plain, and offering good immediate results. The methods described were performed on 325 patients who were operated in CITO in the last 12 years. The article is documented only with the sketches of the method of Chitrov. It is a pity that the photographs of the patients are missing here. (Karfik)

Samar, E. N., Residual defects and deformations of the palate following uranoplasty and their surgical treatment. *Stomatologia*, 43, 61-66, 1964.

The author appreciates the corrective operations of 314 patients suffering from partial or total failure of the suture of the cleft palate. He covers the defects in the hard palate by means of the local tissues, pedicled flaps, and local plasties. He recommends the defects on the border of the hard and soft palate be closed with the secondary total uranoplasty. The great defects are to be settled by means of a tubulated flap. In the case of a short palate the author recommends repeating the whole uranoplasty, eventually in the combination of a Schönborn-Rosenthal

operation. But he differs here by cutting the pedicle after 14 to 16 days. The article contains many citations of the older authors, Russians and foreigners, especially the stomatosurgeons. The review is established on a great deal of material and testifies for many experiences in this specialty. (Karfik)

Shinbirev, N. A., Plastic repair in complete bilateral congenital harelip with prolongation of the skin nasal septum. *Chirurgia*, 6, 71-76, 1964.

The author describes the operation for the primary repair of the complete or incomplete bilateral cleft lip and the way for the prolongation of the columella. The other operation is realized some months after the primary suture of the lip and the author assumes that it is necessary to prolongate the columella before the end of the first year of age. For the same purpose the author does not hesitate to supplement the shortage of the skincover of the lip by a free transplantation. Before the end of the fifth month after the cheiloplasty he closes the alveolar fissure by means of a Lvov. mucous plastic section. The article is not documented, however, by a great number of cases. Since the operation (in which two patients were used for demonstration purposes) was completed relatively late, advantage of an early primary suture was not taken. (Karfik)

Curtis, M. J., Fraser, F. C., and Warburton, D., Congenital Cleft Lip and Palate. *Amer. J. Dis. Child.*, 102, 853-857, 1961.

These authors attempted to refine risk figures for the recurrence of cleft lip and palate in specific categories. They based their risk figures on three comparable family studies in which the families were located through an affected child (the proband). Series C was that of Fogh-Andersen involving 703 probands. Series M was located in Montreal and consisted of 299 probands. Series T was from To-

ronto and consisted of 581 probands. Estimates are presented on the risk of recurrence of cleft lip with or without cleft palate in the near relatives of children with these defects. The figures for various genetic situations are presented in tabular form. (Bradley)

Smolarska, M., Own experiences of the author in treating the children for complete bilateral clefts. *Czasopismo Stomatologiczne*, 15, 11-12, 1962.

The author briefly discusses the possibilities and the results of orthodontic treatment on the basis of clinical material covering 100 individuals affected with complete bilateral clefts. She asserts that they depend mostly on anatomic conditions of the cleft, data and technique of operation, and the age of the child at the time the treatment is started. She mentions several factors which considerably complicate or even render ineffective the treatment, such as premature loss of deciduous teeth, shortening of a vomer in cases of excessively protruding intermaxillary bone, and disturbances in permanent dentition due to an incorrect placement of tooth buds. The author, when drawing her conclusion, is of an opinion that early treatment prevents several occlusal and facial deformations. She advises the continuation of orthodontic treatment until full eruption of permanent dentition and observation in cases when this development of dentition has a satisfactory course. (Penkava: Author's abstract)

Orlik-Grzybowska, A., and Szczepanska, I., Orthodontic diagnosis in cases of schisis of lips and the palate. Summary. *Czasopismo Stomatologiczne*, 12, 6, 1959.

For the orthodontic treatment of children with schisis (clefts) the established diagnosis and the employed surgical treatment is not sufficient. Diagnosis from the point of view of jaw orthopedics should determine the defect of the mastication

system and bite conditions and not the deformity of the upper jaw excluding the mandible. Analysis was carried out on five clinical cases in children with schisis and orthodontic diagnosis was made. Orthodontic diagnosis in cases of complete unilateral and bilateral schisis is made mainly on the basis of analysis of jaw models in relation to the three space planes. The detailed analysis of the upper jaw is made by dividing it into the segments of schisis and their relationship to the lower dental arch, taking into consideration bite determination. (Penkava: Author's abstract)

Penkava, Josef, Vrozene pistele dolniho rtu (Congenital fistulas of the lower lip). *Czasopismo Stomatologiczne*, 64, 285, 1964.

Congenital fistulas of the lower lip are minutely described. The author classifies them morphologically into four types: a) Bilateral fistulas with hardly perceptible orificium on an otherwise unmarked medial part of the lower lip. b) Bilateral fistulas with slit- or funnel-shaped orificium on a thickened medial part of the lip red (vermilion) with protruding rim of the fistulas (these are most frequent). c) Bilateral fistulas terminating as in groups a) and b) above, but with a mucosal fold over their course. d) Solitary fistula on one side, laterally from the medial sagittal plane. All four types are a gradation of the same developmental anomaly. In a historical survey the etiopathogenesis of this malformation is explained. The analysis of a group of 16 patients points to the combination of congenital fistulas with other developmental anomalies with the predominance of cheilo, gnatho, and palatoschisis. The anomaly is more frequent in females. A family incidence was observed in one third of the patients. Finally, the general conditions are stated for surgical treatment and of the most suitable time for surgical intervention. (Penkava)

Szczepanska, I., Own experiences of the author in treating the children for complete one side clefts. *Czasopismo Stomatologiczne*, 15, 11-12, 1962.

On the basis of material collected by the Orthodontic Clinic in Warsaw and comprising the data with regard to 281 children affected with unilateral lip and palate clefts the author discusses three characteristic cases and describes her own experiences in treating children from four months to seven years of age for complete unilateral clefts. Those children presented themselves for orthodontic treatment prior to surgical treatment. She points out at the end of her report that treatment of children affected with clefts and jaw-facial deformation is a collective task to be undertaken by several specialists and carried out according to a plan, taking into consideration the successive stages of treatment. She suggests also the organization of special centres for registering and rehabilitating the children affected with these types of deformations. (Penkava: Author's abstract)

Orlik-Grzybowska, A., Views on the treatment of children with lip and palate clefts in the light of experiences collected by the Orthodontic Clinic of Medical Academy in Warsaw. *Czasopismo Stomatologiczne*, 15, 11-12, 1962.

The author discusses and analyzes the clinical material concerning 557 individuals with lip and palate clefts from two weeks to 27 years of age. She draws conclusions on the subject of faults committed in organizing complete treatment of children from an analysis referring mainly to the children affected with complete clefts. She sees weak points in the cooperation between the specialists and orthodontic surgeons in the matter of dates for performing lip and palate plastic treatment and in neglecting to direct children for orthopedic treatment in due time prior to

and after surgical treatments, depending on the morphologic and functional changes caused by this developmental defect. She argues extensively her own views as well as the position adopted by the Orthodontic Clinic based and supported by six years of observations, consultations, and estimates of results of the treatment carried out in the Clinical Orthodontic Centre for children with clefts. (Penkava: Author's abstract)

Witwicka Z., Sposób rekonstrukcji dwustronnej szczeliny wrodzonej twarzy (A method of reconstruction of oblique bilateral congenital fissure of the face). *Otolaryngol. Pol.*, 18, 111-115, 1964.

Oblique fissure of the face (which must be differentiated from lateral fissure of the nose) is very rarely seen; bilateral fissures are extremely rare. Burian, in 1957, reported eight cases of oblique fissure of the face: two children who died shortly after delivery and six others in whom plastic surgery was performed. The surgery consisted of a two-phased reconstruction a) of the lip, face, and the wing of the nose and b) of the lower eyelid and the tearways. The author describes one case of congenital bilateral oblique fissure of the face in a 17-year-old female. Plastic surgery of the alae nasi was performed by means of a cylindrical lobe. The remnants of the wing were made use of for forming the lower edge of the alae nasi. Burian's method was used for the reconstruction of the lower eyelid. (Vrtička)

Sojkova H., Mateřská škola pro děti s vadami řeči (Nursery school for speech-handicapped children). *Otázky Defektolog.*, 7, 22-23, 1964-5.

The author reports her experience in education of 3- to 7-year-old children at the Department for Speech-handicapped Children of the nursery school in Liberec,

Czechoslovakia. The department was founded in 1952 and is frequented by 13 children. Initially, only alalic and dyslalic children were admitted but now the department is also frequented by palatolalic and stuttering children. Two teachers who are qualified speech therapists as well take care of the speech-handicapped children; two other departments for the total number of 60 normally speaking children are given further care by four teachers. The education program consists of play as well as breathing exercises and articulation exercises combined with rhythmical exercises and gymnastics. Sound and speech exercises are always combined with demonstrations of appropriate toys, pictures, or real subjects, such as animals, etc. The speech-handicapped children partly share the program of the normally speaking children thus becoming better adapted to the society of normal children. Before quitting the special department, every child is to spend a certain time in one of the departments for normal children. The admission of a speech-handicapped child to a special nursery school for speech-handicapped children introduces intensive therapeutic and educational care as early as the period of development of speech and should therefore be considered as an important contribution to the normalization of the speech in alalic, dyslalic, palatolalic, and stuttering children. (Vrtička)

Kallay, F., and Hirschberg, J., Garatszükítő műtétek értéke a rhinolalia aperta megszüntetésében (The value of operations narrowing down the pharynx from the point of view of eliminating the rhinolalia aperta). *Fül-Orr-Gegegyogy* (Budapest), 10, 31-36, 1964.

Pharyngoperistolic operations are always justified when the anatomical conditions of establishment of the rhinopharyngeal closure are absent and the elimination of a present rhinophony by way of logo-

pedic exercises seems to be quite hopeless. There are several types of operations. The authors are using the velopharyngeal plastic operation of Schönborn-Rosenthal and in some cases the operation of Sanvenero-Rosselli. They performed such operations on 21 cases. The success of the operation depends on the cutting out of a pharyngeal flap of the needed breadth and the shaping of suitable room for it in the soft palate. By using proper technique and insufflation-anaesthesia, the age limit of the operation may be reduced to even six years in justified cases. The authors observed the improvement of speech in all cases after the operations but postoperative phoniatric management seems to be necessary by all means. (Vrtička)

Vrtička, K., Zásady léčení rozštěpů patra vzhledem k vývoji řeči (Principles of treatment of cleft palate children with regard to their speech development). *Cs. Otolaryngol.*, 13, 232-238, 1964.

The author gives a review of a round-table discussion which took place in Prague, Czechoslovakia, on May 15, 1964. Brohm, Sedlacek, Seeman (otolaryngologists and phoniatricians), Burian, Karfik (plastic surgeons), Toman (stomatologist), and Kucera (pediatrician) took part in the discussion. All of them agreed that comprehensive therapy of congenital cleft lip and palate includes plastic surgery, speech therapy, and stomatological orthopedy. Pediatric and psychologic supervision should be introduced as soon as possible. According to views of the phoniatricians and plastic surgeons, the cleft palate should be repaired as early as the beginning of the speech development; that is, at the age of two years. Speech therapy must be introduced as soon as possible even in cases where the surgery has to be postponed. This opinion was not shared by the stomatologists who required a previous normalization of interrelation

of the jaws. They referred particularly to secondary deformities of the upper jaw occurring in early operated cases. The suture of the soft palate after Schwecken-diek (introduced in Czechoslovakia by Burian) will probably solve this problem, as it realizes a complete and very early velopharyngeal closure without requiring an early suture of the hard palate. Tonsillectomy and adenotomy should be performed only in cases of chronic inflammation which cannot be cured conservatively. 'Prophylactic' removal of normal tonsils and adenoids should be avoided as it may cause formation of scars and thus diminish the motility of the sutured velum. The treatment of cleft palate children should be concentrated in a limited number of institutions with experienced staff and performed by a team of experts consisting of a pediatrician, a plastic surgeon, a stomatologist, a phoniatrician, a speech therapist, and a psychologist. (Vrtička)

Recamier, J., and Recamier, M., Bec-de-lievre unilateral total (rotation en masse du philtrum). *Annales Chir. Plastique*, 8, 1-4, 1963.

A technique allowing, by a mass rotation of the philtrum, the precise obtention of a lip having the width and the details of a normal lip, with a vertical scar as advocated by Victor Veau. (Psaume)

Borde, J., Bedouelle, J., and Mas-soud, E., Les défauts de la technique de V. Veau dans la chirurgie du bec-de-lievre unilateral et leurs corrections plastiques. *Annales Chir. Plastique*, 8, 19-21, 1963.

The authors first recall the drawbacks of Victor Veau's technique in the surgery of unilateral cleft lip. These drawbacks may be corrected by a graft in fragments. Among the various processes utilized (techniques of Le Mesurier, Millard, Ten-nison), the authors prefer a technique of triangular equilateral graft, cut from the

upper part of the outer edge; some diagrams illustrate this explanation. (Psaume)

Ingelrans, P., Poupard, B., and Lacheretz, M., Traitement du bec-du-lievre unilateral etudes de quelques techniques. *Annales Chir. Plastique*, 8, 5-15, 1963.

Referring to an experience of 134 cases and to a graphic analysis of the incision tracings, the authors have endeavored to draw some precise indications from the technique of Veau, Le Mesurier, Tennison, and Millard in the treatment of the various forms of unilateral cleft lip. They state, in particular, their reasons for discarding Le Mesurier's technique for that of Tennison. (Psaume)

Schmid, E., and Widmaier, W., La greffe osseuse simultanee a la fermeture du bec-de-lievre. *Annales Chir. Plastique*, 8, 23-27, 1963.

After the publication of Le Mesurier's method in 1949, many surgeons abandoned their techniques practiced thus far. Unfortunately, a great deal of cleft lips closed after Le Mesurier's method show an unequal growth with asymmetry of the lip. Therefore, the authors are now practicing Millard's method which seems to take anatomy more into account and, according to their experiences, has better late results. Another problem is the prevention of the compression in clefts of jaw and palate. For this reason since 1952 Schmid implants bone chips in the clefts of the jaw. Since then, compressions of the jaw no longer occur. In cases of bilateral clefts, such implants bring the mobile premaxilla into connection with the lateral parts of the jaw. The authors implant bone chips in the jaw and palate when closing the cleft lip. By this procedure the whole bony fissure can be stabilized in one operation. (Psaume)

Ginestet, G., Sequelles des becs-de-lievre et divisions palatines. *Annales Chir. Plastique*, 8, 29-32, 1963.

The author considers the osseous, labial, and nasal sequelae of cleft lip. a) For the upper maxilla affected with endo and retrognathism, he performs an osteotomy in two steps to restore the articulation. b) For osseous aplasia and the subsequent collapse of the ala, he advocates a sub-narinar osseous graft. c) For the nose, he sometimes supports the lobule with a fragment from the cranial wall of a newborn. d) The approach of the alar cartilages is facilitated by a yoke-shaped cutaneous incision. e) The short lip of bilateral cleft lip is restored by a step-shaped cheiloplasty. (Psaume)

Dupuis, A., Sequelles velo-palatines du bec-de-lievre: traitement chirurgical. *Annales Chir. Plastique*, 8, 33-37, 1963.

The velo-palatal sequelae of cleft palate, even when operated on the very young, remain very frequent. They induce phonetic disorders and backward flow in the nostrils at mealtime. They may be roughly divided into five groups: a) Never operated palatal divisions; b) residual slits at the level of the hard palate in operated patients; c) immobile, too short velum, or velum with residual slit; d) patients with no longer tolerated velo-palatal prostheses; e) patients operated when very young with complete failure. Many of these patients may be greatly improved by palato-velar surgery. The association of several techniques (Veau, San Venero, Roselli, Ginestet) is often useful. Certain cases still require velo-palatal substitute prostheses. (Psaume)

Ginestet, G., and Merville, L., L'asymetrie narinaire du bec-de-lievre unilateral: correction chirurgicale secondaire. *Annales Chir. Plastique*, 8, 39-45, 1963.

The asymmetry of the nostrils of unilateral cleft lip may be corrected towards the end of adolescence by repositioning the alar cartilage on the cleft side. The reposition is made after baring the two alar cartilages by Rethi's incision. During the entire period of cicatrization, the cartilage and the mucosa are held in their position of reduction by a small endonasal moulding. (Psaume)

Pitanguy, I., Rhino-cheilo-plastie a ciel ouvert dans les sequelles du bec-de-lievre. *Annales Chir. Plastique*, 8, 47-52, 1963.

The author has endeavored to give his experience of the treatment of the sequelae of cleft lip in adults. This work is completed by photographs of operated patients and schemas illustrating the systematization of the suggested operative technique. (Psaume)

Psaume, J., Traitement prothetique des sequelles du bec-de-lievre. *Annales Chir. Plastique*, 8, 53-59, 1963.

Prosthesis almost always has a part to play in the treatment of the sequelae of cleft lip. At the least, a banal prosthesis is needed; more often still, in spite of the progress of treatment, a particular prosthesis for the purpose of advancing the dental arch, the upper lip, and the threshold of the nares is required. These prostheses must often be prepared by dental treatments and by a lengthening of the vestibulum. Exceptionally large bucconasal prostheses may improve the very severe sequelae, which is fortunately infrequent. (Psaume)

Poupard, B., Sequelles de gueule de loup: allongement simultane de la levre et de la columelle par la technique de Millard, modifiee. *Annales Chir. Plastique*, 8, 113-115, 1963.

In two cases of grave sequelae of bilateral cleft lip a four flap procedure was

employed to restore simultaneously the height of the upper lip and of the columella. It was found necessary and easy to prop up; at the same time, the nasal tip was restored by a bone graft from the iliac crest. (Psaume)

Moyson, F., Jeanty, M., and Delforge, N., Traitement orthodontique precoce dans les fentes labiales avec division palatine. *Annales Chir. Plastique*, 8, 117-121, 1963.

The authors report their experience of McNeil's early fitting with an apparatus in labio-palatine clefts. They are in agreement with those findings obtained by other teams: favorable psychological influence on the parents' feeding facility, obturated cleft, and therefore fewer instances of infections. The most surprising effect concerns the growth of the hypoplastic maxillary segment which reduces its lag and thus it lines up quite correctly with the healthy segment. (Psaume)

Joss, G., Reparation du bec-de-lievre par la methode de rotation-avancement de Millard. *Annales Chir. Plastique*, 8, 253-259, 1963.

Millard's method seems to the author to have been unduly criticized. The author's experience with 25 cases operated on between August 1958 and August 1960 is reviewed and this technique appears as the one best adapted to the following fundamentals in cleft lip repair: sufficient length of the lip, yet without excess and with no transverse retraction; natural 'cupid's bow'; filled out outline, allowing for 'pouting'; symmetrical nostrils, with firm nostril basis; operator simplicity; removal of a minimal amount of tissue. Some of the early imperfect results are ascribed to a faulty procedure. Technical improvements have led to satisfactory achievements, even in cases of very wide clefts. (Psaume)

Malek, R., Evaluation de la taille des lambeaux dans les plasties en Z. *Annales Chir. Plastique*, 8, 261-264, 1963.

When skin protraction through a Z-shaped plasty is required, two methods may be considered: a) Calculation should be made with regard to the length required of the apex angle of both triangles that are to be transposed and of the side represented by the initial length. This can be done with the method of the three circles, described herein. b) Execution of a Z-plasty should use two equilateral triangles, the side of which has been previously calculated, the plasty being then limited to only a segment of the initial length. This above technique, the geometrical analysis of which is described, is made easy by the use of a measuring device to determine the initial length and the length required. Thus the size to be given to the plasty flaps is provided right away. (Psaume)

Lambert, A., and Psaume, J., Syndrome de Pierre Robin. *Annales Chir. Plastique*, 9, 59-63, 1964.

Acute glossoptosis in the infant described by Pierre Robin includes two different clinical syndromes. The first one is related to muscular imbalance caused by progressive cure of the deformations; the mandibular anomaly is the consequence of glossoptosis. The second one is related to a mandibular hypoplasia which cannot improve with growth; glossoptosis is the consequence of the mandibular anomaly. In all cases immediate prognosis may be severe and require emergency treatment. (Psaume)

Grignon, J. L., La place de la chirurgie dans le syndrome de P. Robin. *Annales Chir. Plastique*, 9, 65-72, 1964.

On the basis of a comparative study of seven cases observed in five years with those published in literature, the author

found the Robin syndrome to be an anatomo-clinical entity, isolated or associated with other malformations whose four major signs are: a) glossoptosis, b) micrognathia, c) velo-palatine cleft, d) respiratory difficulties. The latter is apparently related, among other things, to the clinical form of the velo-palatine cleft. The attitude to adopt depends on evolutionary dangers and difficulties in bringing up the child. One must strive to resolve nutritional and respiratory problems as quickly as possible. Apart from prognostic data related to possible associated malformations which bring their own therapeutic problems, the action to be taken can be according to three possibilities where surgical treatment aims at facilitating the pediatrician's task. a) Extensive velo-palatine cleft, child easily raised: medical treatment and effective supervision. b) Extensive velo-palatine cleft, child difficult to raise: early anterior fixation of the tongue. c) Only velar cleft, with respiratory difficulties generally beginning at birth: very early anterior fixation of tongue, occasionally to be performed as a neonatal emergency operation. On the basis of standard techniques for anterior fixation of the tongue (while seeking to avoid certain of their disadvantages), the perimandibular anterior fixation method of Duhamel, Douglas, and Routledge is proposed and described. (Psaume).

Brown, R. F., A reappraisal of the cleft-lip nose with the report of a case. *Brit. J. plastic Surg.*, 17, 168-174, 1964.

The case described was a 10-year-old boy with the typical droop of the nostril without cleft of the lip or alveolus. The author reviews the embryology of the lip and nose and the various theories relating to the pathological anatomy of the cleft lip. With this case the author emphasizes the close link existing between nose and lip development, and the strong suggestion

that nostril deformity is part of the cleft lip deformity and not a secondary deformity. (Benavent)

DesPrez, J. D., Kiehn, C. L., and Magid, A., The use of a silastic prosthesis for prevention of dental arch collapse in the cleft palate newborn. *Plastic reconstr. Surg.*, 34, 483-490, 1964.

Over a period of 1½ years, 12 patients have been treated using a Medical Silastic #385 prosthesis. The device is formed while the child is under anesthesia just prior to cleft lip repair which the authors carry out in the newborn period. The lip repair is then carried out and the prosthesis reinserted within a few days. Thereafter it remains in place and is cleaned only at 3 to 4 week intervals. Several children have used the same prosthesis for over a year, and with one replacement, one child has worn it for 17 months. Despite growth, the size of the cleft space does not seem to vary as judged by the fact that prosthesis retention is not a problem. While there is no prevention of palate growth there is no possibility of collapse of the cleft space. In bilateral clefts the prosthesis can be trimmed anteriorly to permit the premaxilla to move posteriorly without angulation. Later stabilization of the arch achieved has been accomplished by bone grafting in one child. While the observations are as yet limited in number and range, the ease and logic of the approach appear commendable. (Cosman)

Peer, L. A., Walker, J. C., and Meiger, R., The Dieffenbach bone-flap method of cleft palate repair. *Plastic reconstr. Surg.*, 34, 472-481, 1964.

The history of the bone flap repair of cleft palate is reviewed and traced back to Dieffenbach's original description in 1826. The senior author has used this technique for 25 years since being impressed with the postoperative speech re-

sults. It consists of two stages two weeks apart. The first operation consists of lateral relaxing incisions in the mucoperiosteum followed by chisel osteotomy of the bony palate and infrafracturing. Bleeding is controlled with packing and topical adrenalin. Two weeks later the free borders of the cleft are denuded, holes are drilled in the bony palate, and the relaxing incisions reopened. The soft palate is closed in two layers with catgut and the bony palate closed with silk. Unilateral clefts are converted to bilateral to adapt to this method. Small clefts may be closed in a single operation. For palatal lengthening a through and through Z-plasty is employed in the soft palate. An anterior residual palatal defect is intentionally left and closed one year later. Advantages of this technique are simplicity, uniformly good results in closing the hard palate, and good functional movement of the soft palate. Thirty per cent require no further treatment and most of the remaining have minor defects which are readily corrected by speech therapy. The remaining cases are subjected to Z-plasty or pharyngeal flap. Cephalometric studies on patients operated on before 2 years of age have not shown subsequent underdevelopment of the maxillae. Therefore, these operations are done between seven and 14 months of age, prior to learning to talk. (Ashley)

Peer, L. A., Gordon, H. W., and Bernhard, W. G., Effect of vitamins on human teratology. *Plastic reconstr. Surg.*, 34, 358-362, 1964.

Experience with a program of prenatal vitamin supplementation in 594 mothers who had previously given birth to children with cleft lip and/or palate deformity is reported. Use of folic acid and vitamin B₆ together with other B vitamins and vitamin C was emphasized. In this group, 418 did not receive or did not adhere to the vitamin regimen. There was a 4.7% incidence of cleft deformity and an overall 7.9% congenital deformity incidence

for these untreated pregnancies. In 176 treated women there was a 2.2% incidence of cleft and an over all 3.4% incidence of deformity. While suggestive, the data are not statistically significant and the elements of selection involved in the treated and untreated groups are unexplored. (Cosman)

Greene, J. C., Epidemiology of congenital clefts of the lip and palate. *United States Public Health Service: Public Health Reports*, 78, 589-602, 1963.

A thorough review of the literature was undertaken as part of the preparation for conducting investigations in the epidemiology of cleft lip and palate. The author does a complete summary of the relevant published research under the three headings: pathogenesis, incidence, and etiology. There are eighty-two bibliography entries. (Noll)

Kydd, W. L., and Belt, D. A., Continuous palatography. *J. speech hearing Dis.*, 29, 489-491, 1964.

A palatographic procedure is described in which contact of the tongue with stainless steel electrodes held in an artificial palate completes the input circuits of dc amplifiers which in turn illuminates matchings lights on a readout panel. Results are permanently recorded by taking motion pictures of the readout panel and the subject, with a simultaneous sound track. The procedure permits continuous palatography during continuous speech. (Lutz)

Fukuhara, T., and Saito, S., Possible carrier status of cleft palate with cleft lip: report of cases. *Bull. Tokyo med. dent. Univ.*, 10, 333-345, 1963.

Laminagraphic x-ray examinations were obtained for members of 12 families in which at least one subject is afflicted with cleft palate and/or cleft lip. There were deviations in the nasal septum and/or palatal plate which were observed on the

laminagraph of one of the parents of children with cleft palate and/or cleft lip, though visible anomalies were not always present. Similar invisible deviations were observed in some siblings or children of subjects with visible clefts but not all. On the basis of the findings reported, the authors suggest that bone cleft is a microform of cleft palate and/or cleft lip and that it is transmitted in the manner of dominant inheritance. Other characteristics noted as microforms of cleft palate and/or cleft lip include: a) rotation and crowding of the maxillary frontal teeth, b) congenital missing lateral and central incisors, c) asymmetric shape of nose, and d) raphe in the upper lip. (Lutz)

Takagi, Y., Human postnatal growth of the vomer in relation to base of cranium. *Annals otolaryng., rhinol. Laryngol.*, 73, 238-247, 1964.

Caliper measurements of the vomer to spheno-occipital synchondrosis were obtained from 242 human skulls. In the newborn skull, the juncture of the cephalo-dorsal margin of the vomer to the cranial base is about at the ventral margin of the base of the sphenoid. With postnatal growth this site migrates dorsalward, so that in the adult the vomer approximates the dorsal margin of the base of the sphenoid. Comparative observations were made from mature skulls of gorillas, chimpanzees, and monkeys. (Noll)

Fraser, F. C., and Warburton, D., No association of emotional stress or vitamin supplement during pregnancy to cleft lip or palate in man. *Plastic reconstr. Surg.*, 33, 395-399, 1964.

Examining the pregnancy records of the mothers with cleft lip and/or cleft palate, disparate genetically determined diseases or the same family records for pregnancies leading to normal siblings, revealed no significant differences in the frequency of maternal emotional upsets between the groups. However, the mothers

reported emotional upsets more often in the pregnancies leading to the birth of affected children. This would appear to represent retrospective maternal memory bias and is true for any abnormal pregnancy. The authors also examine some of the statistical evidence for advocating the use of prenatal vitamin supplements as a preventative of cleft deformity. Their conclusion is that there is no warrant for such advocacy. (Cosman)

Wang, M. K., Macomber, W. B., and Heffernan, A. H., Congenital micrognathia: its surgical treatment. *Plastic reconstr. Surg.*, 33, 550-555, 1964.

The history of the description and treatment of the Pierre Robin syndrome is reviewed. The authors describe a modification of the Beverly Douglas tongue-lip adhesion used in surgical management. Their technique involves the use of lip and tongue flaps raised so as to prevent injury to the sublingual gland duct while nevertheless affording a broad contact surface. Used since 1954, no premature separation of tongue from lip was noted. The authors also record their disapproval of recent statements in the literature suggesting a special need for early repair of the cleft palate associated with the Pierre Robin defect. (Cosman)

Lewin, M. L., Management of cleft lip and palate in the United States and Canada. *Plastic reconstr. Surg.*, 33, 383-394, 1964.

This is a report of a questionnaire study involving a 54% return on 588 queries. Based on admittedly fragmentary material it would appear that fewer than 15% of surgeons operate a unilateral cleft lip in the first week of life and that most select the six to 12 week period. While the quadrilateral flap and triangular flap methods are about equal in frequency of use, the reporting surgeons have adopted

the more recent method of Millard in 19.6%. About half of the respondents reported nostril reconstruction by full undermining of alar cartilages. In bilateral clefts 43.4% of surgeons introduce lateral flaps into the body of the prolabium; straight line closure of skin with vermilion flaps under prolabium is utilized by 40.2%. About half of the group operate both sides of the cleft simultaneously. Intra-tracheal anesthesia for the lip repair was favored by 78%. Some 211 surgeons have changed their lip repair methods at least once in the last decade with tendency toward the triangular flap or the Millard procedure. In bilateral cleft the trend is away from the Hagedorn procedure. Cleft palate repair is mostly accomplished by 18 months of age. Anterior palate repair is achieved by vomerine flap by half of the surgeons. Von Langenbeck repair is used somewhat more frequently than V-Y retroposition. Only 12% of surgeons have adopted the technique of early soft palate and late hard palate closure. Only 6.7% of surgeons use osteoperiosteal flaps. Two-thirds of surgeons fracture the hamulus. Forty-four per cent expressed no concern about the nasal surface mucosal defects in any of the procedures used. In secondary operations for velopharyngeal insufficiency, 64.3% chose to use a superiorly based pharyngeal flap. Resort to this flap in younger patients was one of the changes in surgical management noted in this area. (Cosman)

Callas, G., and Walker, B. E., Palate morphogenesis in mouse embryos after x-irradiation. *Anat. Record*, 145, 67-71, 1963.

The purpose was to study the embryology of cleft palate in mice induced by x-irradiation, and to see whether strain differences existed in the reaction of mice of the inbred strains C57BL and A/Jax. On day 11½ post-conception total body x-irradiation was administered to pregnant females at a delivered dose of about 300 r.

Females were sacrificed on days 12 to 18. Unirradiated pregnant females were studied in conjunction with the treated females. Progress in palate development was evaluated in terms of chronological age, morphological rating, and weight of the embryos. Many of the irradiated embryos were moderately or considerably larger than the control embryos at the same or later stages of palate development. That is, the x-irradiation interfered with palatal shelf movement to a sufficient degree for prefusion stages to persist until the late fetal period. Movement of the palatine shelves from the sagittal to the horizontal plane was found to have been retarded by the x-irradiation. Measurements of head and palate did not show any consistent disproportionality of palate growth in the treated embryos except that which results from retardation of shelf movement. The fetuses of the A/Jax strain averaged a greater degree of shelf retardation according to shelf position at the late fetal stage than did the C57BL strain. (Noll)

Loevy, H., Genetic influences on induced cleft palate in different strains of mice. *Anat. Record*, 145, 117-122, 1963.

This paper reports some of the genetic aspects of cortisone induced cleft palate susceptibility in the Strong *a* mouse contrasted with another less susceptible strain (C₃H) and each of their various strain intercrosses. In addition, offspring of Strong *a* females mated with C₃H males were mated among themselves (F₂ generation). The pregnant females were injected daily with 1.25 mg of cortisone from the eleventh through the fourteenth day of pregnancy and sacrificed on the seventeenth or eighteenth day. Spontaneous clefts occurred in 8.8% of the control Strong *a* mouse and 0.6% in the untreated C₃H mouse. In treated animals, cleft palate was induced in 100% of the Strong *a* offspring and 36.6% in the C₃H offspring. Cross matings of these two strains resulted

in induced cleft of 11.7% if the mother was Strong *a* and 43.7% if of C₃H strain. Cleft palate was produced in 29.7% of the intercross offspring when mated among themselves. There was no relation between incidence of induced cleft palate and albinism. The author did observe, however, that the more crowded the uterine horn, the more affected fetuses it contained, even though there was no significant correlation between occurrence of cleft palate and the position of the fetus in utero. (Noll)

O'Hara, A. E., Roentgen evaluation of patients with cleft palate. *Radiol. Clin. North Amer.*, 1, 1-11, 1963.

The author describes the application of lateral roentgen techniques to the clinical study of velopharyngeal function as an aid in evaluation of cleft palate subjects and those with other forms of velar insufficiency. One can determine the thickness, length, and mobility of the soft palate, the relative depth of the nasal pharynx, the position of the tongue, and the presence or absence of the adenoid pad. If velopharyngeal incompetence is present, the degree of incompetence can be determined. A brief review is given of some of the relevant aspects of normal speech physiology and pathology related to the velopharyngeal mechanism. Representative film frames of a normal subject and several cleft palate patients are shown. He includes short case histories of five patients. Suggested exposure settings are given. The article is intended for the radiologist who has not had previous experience in the use of roentgen approaches in cleft palate management. (Noll)

Greene, J. C., Vermillion, J. R., Hay, S., Gibbens, S. F., and Kerschbaum, S., Epidemiologic study of cleft lip and cleft palate in four states. *J. Amer. dent. Assoc.*, 68, 387-404, 1964.

Birth records were examined from 3.5 million live births in California, Hawaii, Pennsylvania, and Wisconsin for the years 1956 through 1960. Each certificate was reviewed for mention of cleft lip and/or palate, and every two-hundredth was selected as a control. From the total number of records, there were 4,451 babies with facial cleft and 17,859 controls obtained. Hawaii reported the highest incidence (one cleft baby for every 665 live births), and Pennsylvania reported the lowest (one for every 859 live births). There were differences between the four states in occurrence of particular types of cleft. Of all of the cleft cases, 44% had cleft lip and palate, 29% had cleft palate alone, and 27% had isolated cleft lip. Several factors were studied in relation to the cleft conditions, e.g., plurality and location of clefts of the lip, incidence of clefts in plural births, race, parental age, birth order, occupation of father, use of prenatal care, birth weight and length of gestation, and other congenital malformations. The authors compare their findings to several other related surveys. (Noll)

Milham, Samuel, Jr., Underreporting of incidence of cleft lip and palate. *Amer. J. dis. Child.*, 106, 185-188, 1963.

A total of 143 cases of cleft lip or palate or both combined were ascertained in 79,536 total births at three upstate New York hospitals in the years 1950-1960. This is an incidence of 1.8 per 1,000 births, or 1 in 556 births. Of 143 cases, 26 (18.2%) would have been missed if ascertained through hospital indices only; 39 of 143 cases (27.2%) would have been missed if ascertained through vital records only. Underreporting of cases may, therefore, be a major bias in retrospective incidence determinations, using either vital records or hospital records. Variations in reported incidence of cleft lip and palate may, in part, reflect differences in the

completeness of reporting cases. (Bradley: Author's abstract)

The following papers were presented at annual meetings of professional associations.

Presented at the 42nd Meeting of the International Association for Dental Research, abstracts of papers in *Journal of Dental Research*, Volume 43, 1964.

Burdi, A. R., Prenatal growth of the human nasomaxillary complex.

Mazaheri, M., and Biggerstaff, R. H., Some etiological factors in cleft lip and/or cleft palate.

Warren, D. W., Velopharyngeal orifice size and upper pharyngeal pressure-flow relationships during speech.

Fukuhara, T., Traits indicative of possible gene carrier status of cleft lip and cleft palate.

Pruzansky, S., and Aduss, H., The development of the deciduous occlusion in complete unilateral cleft lip and palate.

Avery, J. K., and Gryson, P., Studies of sulfo-mucopolysaccharide metabolism in the developing palates of mice.

Presented at the 40th Meeting of the American Speech and Hearing Association, abstracts of papers in *Asha*, Volume 6, 1964.

Moll, K. L., and Shriner, T. H., A new concept of velar activity during normal speech production.

Coleman, R. O., The effect of changes in width of velopharyngeal aperture on acoustic and perceptual properties of nasalized vowels.

Spriestersbach, D. C., and Morris, H. L., The pharyngeal flap as a speech mechanism.

Van Hattum, R. J., and Worth, J. H., Oral and nasal air flow for normal

- speakers during syllable and sentence production.
- Buck, M. W.**, Oral-cast measurements of mature, unrepaired, complete cleft palates.
- Battin, R. Ray, Brauer, R. O., Brien, Lois, and Cronin, T. D.**, Push-back repair and post-operative speech results in sixty cleft-palate patients.
- Palmer, M. F., and Machida, J.**, Relative importances of anatomical measurements, articulatory ability, and blowing ability in assessing nasality of cleft-palate patients.
- Elliott, C. R., Lauder, C., and Burgess, E. H.**, A discriminant-function analysis of articulation in cleft-palate prosthesis.
- Noll, J. D., and Platt, L. J.**, High-speed cinematography of oropharyngeal function.
- Subtelny, Joanne D., Worth, J., and Sakuda, M.**, Study of intra-oral air pressure during speech.

REGISTRY OF CURRENT RESEARCH PROGRAMS

The Registry will be maintained in subsequent issues of the *Journal*. Currently, the major source of information is the Bio-Sciences Information Exchange; however, other sources are invited to contribute. Descriptions of research programs to be listed with the Registry should be sent to the Editor.

Items are: Name of project; supporting agency; name of principal investigator with degrees; academic rank, institution, and address; and summary of project.

Nutritional factors and mammalian development (National Science Foundation). *Lucille S. Hurley*, Ph.D., Department of Home Economics, University of California, Davis, California.

Summary: Recent research findings from this laboratory have described a syndrome of congenital abnormalities following a maternal dietary deficiency of manganese, which involved the skeleton and the inner ear, and resulted in severe disturbances of locomotion. Questions proceeding from these findings are: a) Are the abnormalities (skeletal and behavioral) observed in manganese-deficient young specific for this particular nutrient, or can they be found to occur following other teratogenic procedures as well? b) Are the skeletal and neural defects related in their etiology? Specifically, do other maternal

dietary deficiencies which result in skeletal defects and ataxia in the young also produce abnormalities of the inner ear? In the light of these questions, the roles of several nutrients in fetal and neo-natal development will be explored in the rat. These will include zinc, vitamin A, and vitamin B₆. An ultimate goal will be the correlation of structural, functional, and biochemical development.

Gingival collagen metabolism in guinea pigs, rats, and swine (NIH). *C. K. Claycomb*, Department of Biochemistry, University of Oregon Dental School, 611 S. W. Campus Drive, Portland 1, Oregon.

Summary: A time sequence study of gingival collagen metabolism in guinea pigs, rats, and miniature swine receiving radioactive labeled amino acids under

physiological and pathological conditions will be undertaken. Included in the latter category will be: a) healing of artificially produced periodontal pockets in normal and scorbutic guinea pigs; b) effects of mechanical movement of teeth in rats and miniature swine on collagen turnover. Collagen precursors, glycine and proline, isotopically tagged with C^{14} or H^3 will be administered and analyzed for the degree of their incorporation by: a) determining the radioactivity in salt extractable and gelatinized fractions, b) thin layer chromatography of acid hydrolysates, and c) determining the ratio and activity of proline to hydroxyproline. Radioautographs of fibroblasts labeling will be made using film stripping methods on selected periodontal tissues.

Conference on communicative problems in cleft palate (NIH). *John V. Irwin*, Speech and Hearing Clinic, University of Wisconsin, Madison, Wisconsin, for the American Speech and Hearing Association.

Summary: The aim of the proposed three-day conference is to bring leaders from medicine, dentistry, and communicative disorders together in a comprehensive review of orofacial disorders. This program would be aimed at the directors of training programs in speech pathology and audiology at the 39 American colleges and universities offering doctoral programs in this area. An additional 11 trainees would consist of selected individuals, drawn primarily from speech and hearing, whose professional interests relate specifically to the orofacial complex.

Human embryonic defects: a correlative study (NIH). *Howard W. Jones, Jr.*, M.D., Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore 5, Maryland.

Summary: The specific aim of this investigation is to study the normal and

abnormal development and function of the human reproductive system. This study will be correlated with respect to a) gross anatomy, b) microscopic anatomy, c) endocrine function, d) cytogenetics, and e) psychosexual orientation. The principal emphasis of the investigation will center about anomalous development of the female reproductive system, but the facilities established and the techniques and patients available will form a unique opportunity to study fetal anomalies in general. It is believed that such a correlative study might furnish an explanation for questions raised by current piecemeal investigations and might give a much more complete understanding of the normal development and function of the human reproductive system.

Masticatory function in cleft palate cases (NIH). *Krishan K. Kapur*, D.M.D., Department of Dental Science, Tufts University School of Dental Medicine, 136 Harrison Avenue, Boston 11, Massachusetts.

Summary: Eighty-two surgically treated cleft palate cases have been given the masticatory and speech tests. Complete medical and dental case histories along with study models, Kodachromes, and in 26 cases, cephalometric radiographs were recorded for each subject. A one-week dietary chart representing the type and quality of food intake was recorded by each subject. Seventy-three normal subjects were selected at random from the general clinic so that each cleft palate subject was matched for his age from the normal population. The mean chewing efficiency for the cleft palate group was 35.3% and for the control group was 52.6%. Speech recordings are being evaluated by a panel of three speech therapists for word intelligence and nasality in connected discourse. Determinations of the oclusal platform area, amount of oclusal contact, and maxillary arch form will be made from the

study models. Fifteen cases showing marked deficiency in the masticatory function and/or speech will be selected and prosthetic appliances will be constructed to rehabilitate occlusion and arch form and its influence on speech and masticatory function will be determined.

Biomechanical and clinical evaluation of lower extremity disabilities (Easter Seal Research Foundation of the National Society for Crippled Children and Adults).

Verne T. Inman, M.D., Department of Orthopedic Surgery, University of California School of Medicine, San Francisco, California.

Summary: Biomechanical and clinical studies of below-knee disabilities will be continued. Initial clinical testing on adults of the University of California System of External Control (Anklo) will probably be completed during the coming year. Study of the effectiveness of this device in its application to children will be continued, though the factor of growth makes complete evaluation difficult until more time has elapsed. Studies have been initiated to develop a) a system of precise measurement of ranges of joint motion in the foot and b) a method for locating the axes of rotation of joint complexes. These methods, if successful, would supplement present methods of clinical testing. Exploration of the functional value and therapeutic effectiveness of shoe inserts will be continued. Development of corrective shoes is under consideration in a limited study. Studies will be undertaken to determine principles of prescription for the application of the UC-SEC (A) to functional losses in adults and children, to explore the use of the barograph as an additional method for determining the pattern of load distribution through the foot, and to define in detail problems for orthotics research that will aid in the management of orthopedic

and neuromuscular disorders (including congenital malformations) in children.

Studies in growth retardation in infants and children (NIH). *Gerald H. Holman*, Department of Pediatrics, University of Kansas Medical Centre, Rainbow and 39th Street, Kansas City, Kansas.

Summary: Present techniques allow us to differentiate only a few of the many dwarfed children seen in pediatric clinics. It is hoped that by looking at certain other parameters a better classification of the so-called primordial or genetic dwarf will result. Growth hormone activity will be estimated by a recently described radio-immunoassay. In addition the sulfation factor, a probable index of pituitary growth hormone will be estimated. Comparisons with normal and bonafide pituitary dwarfs will be made. Many of these children have poor fat depots. Therefore some aspects of fat metabolism will be studied, particularly plasma fatty acids before and after glucose loads. It is also hoped that plasma degradation curves of these fatty acids can be measured in these dwarfed children. Fat absorption will also be studied. Some dwarfism is associated with chromosomal defects. For that reason chromosomal analysis will be carried out looking especially for mosaic cell lines.

Experimental induction of cleft palate in mice (NIH). *Anand P. Chaudhry*, Ph.D., Department of Pathology, School of Dentistry, University of Pittsburgh, Pittsburgh, Pennsylvania.

Summary: The investigation will be conducted on strain A mice maintained under controlled environmental conditions as required for periodicity analysis. The first experiment will involve the determination of two different doses of cortisone which when given singly will induce 100% and 60 to 70% incidence of cleft palate

respectively without undue fetal resorption or maternal death. In the second experiment, the pregnant mice (as determined by the vaginal plug) will be divided into six groups of appropriate number of animals and given a single predetermined dose of cortisone (which will induce 60 to 70% cleft palate) at four hour intervals along a 24-hour period starting at 8 a.m. of the 11th gestation day to 4 a.m. of the following day. The fetuses will be removed on the 17th or 18th days of gestation and examined for incidence of cleft palate. In the third experiment, the pregnant mice will be given a single dose of cortisone (which would induce 100% cleft palate) and the fetuses removed 4, 8, 12 and 24 hours following injection. They will be fixed in Bouin's Solution. Serial sections of the palatal shelves will be cut and stained with Heidenhain's hematoxylin. The number of mitoses per 500 oil immersion fields will be counted and compared with that of control fetuses removed from untreated mothers.

Biochemical and cytological genetics in human disease (American Heart Association, Inc.) *Kurt Hirschhorn*, M.D., Department of Medicine, New York University Post-Graduate Medical School, 550 First Avenue, New York 16, New York.

Summary: Tissue culture methods will be used to detect and quantitate cellular metabolic differences in cells cultured from normal and genetically abnormal metabolic diseases, especially those involving lipid metabolism and atherosclerosis, to attempt to discover genetic factors associated with these diseases. Recently advances in biochemical and cytological techniques have made it possible to study many different forms of inherited metabolic diseases by comparing protein and enzyme patterns of the serum and cell culture from normal and abnormal indi-

viduals. In this manner we hope to learn more about normal variation, as well as to attempt to elucidate some basic biochemical mechanisms in genetic disease. A number of congenital diseases have been associated with congenital anomalies. We will continue to search for such anomalies in various genetic and congenital abnormalities including congenital heart disease.

Facial growth and dentition in cleft palate subjects (NIH). *Robert F. Hagerty*, M.D., Department of Surgery, Medical College of South Carolina, 16 Lucas Street, Charleston, South Carolina.

Summary: During the forthcoming project year evaluation of methods of preventing dental arch collapse will continue. The palatal arch bar will be used until a statistically significant number of cases for final evaluation has been completed. A pilot study of the bone grafting technique, following Stellmach's approach for the most part, has been initiated and will be broadened, pointing toward its indications and results in facial growth.

Objective evaluation of palatopharyngeal function (NIH). *Robert A. Chase*, M.D., Stanford University School of Medicine, 300 Pasteur Drive, Palo Alto, California.

Summary: It is proposed that any patient with nasal emission with speech may be objectively analyzed by the series of studies now in use. Each patient has a history taken, physical examination done, speech analysis with tape recordings by qualified speech pathologists, and audiograms. In addition to these standard studies, the patient is subjected to a series of respiratory analysis studies and cine-fluorography of palate function. All of these studies evaluate palatopharyngeal efficiency, with the patient using maximum effort. It is proposed that the study will

now be expanded to include Hot Wire Flow Meter studies of nasal air flow with the production of standard primitive sounds. Respiratory analysis studies consist of volumetric, pressure, and suction achievements at the oral level, comparing performance with the nose open, then with the nose blocked. Dynamic records of palatopharyngeal competence efficiency are made, using oral resting minute volume and maximum breathing capacity studies, comparing curves obtained with the nasal port open and then closed. This dynamic record will document fatigability of the palatopharyngeal mechanism. The multi-technic objective approach to an analysis of palatopharyngeal efficiency clearly divides patients into those who require treatment other than speech therapy from those who need such mechanical aid. With continued study the exact procedure necessary in each instance can be pinpointed for each patient's individual problem in palatopharyngeal incompetence. Two new operative approaches to palatopharyngeal incompetence correction are under study in humans and monkeys.

Cineradiographic evaluation of dental speech aids (NIH). *Herbert K. Cooper, D.D.S., H. K. Cooper Institute for Research, Education, and Rehabilitation, Lancaster Cleft Palate Clinic, 24 N. Lime Street, Lancaster, Pennsylvania.*

Summary: A cineradiographic evaluation of palatalpharyngeal closure is one phase of our objective to establish a standard for each of the contributing factors entering into the production of a given quality of speech. We seek to define the relative importance of each factor in normal speech in order to determine their variation in the abnormal. Investigators are formulating a multi-discipline approach to this problem to determine the best location of the speech prosthesis to produce optimal voice quality. Cine-

radiographic apparatus and methods, in addition to sonographic techniques, are being modified in order to study the speech organs during function. A speech sample of *normal* individual was recorded. Significant relationships between anatomy and physiology were indicated. This base line data is presently under revision to more fully define the phenomena observed by all the specialists involved in this research effort. Our ultimate purpose will be achieved when we are able to analyze the patient datum quantitatively in order to foster a more definitive approach to diagnosis. A recording system is being developed to synchronize the sonogram, speech sound, and the cineradiographic study at faster frame rates using the same time base. The various research disciplines represented in this grant are investigating means to relate and present for research analysis the staggering accumulation of datum in the patient files. This will be rearranged into a more manageable state for quick retrieval, comparative analysis, and ultimate punch card storage for automation in diagnosis.

'Stresscoat' deformation studies of the mandible (NIH). *Donald F. Huelke, Ph.D., Department of Anatomy, The University of Michigan, Ann Arbor, Michigan.*

Summary: Studies on the biomechanics in the production of fractures of the human mandible are in progress. Using nondestructive testing methods—Stresscoat lacquer and strain gages—areas of high tensile strain in jaws due to low energy, nonfracturing impacts are recorded. Additionally such testing procedures are being carried out on intact cadaver heads. Destructive tests whereby fractures are produced in both individual mandibles and intact heads are recorded by strain gages and high speed photography to enable us to actually see the production of the fracture.

LETTER TO THE EDITOR

Editorial note: The following letter is addressed to the President of ACPA (Dr. Betty Jane McWilliams), but expresses sentiments which, in Dr. McWilliams' opinion, should be shared with members of the Association.

20 July 1964

On July 2 you kindly wrote to my father, Professor Kilner, informing him of the decision of the Council of the American Cleft Palate Association to honor him with membership of the association. It is with sadness that I tell you that the same day my father died here suddenly.

The growing interest taken in reparatory work on cleft palate cases was particularly dear to him and reflected his own contribution to this work between the wars, but in recent years it was the research work in this project which most appealed to him and this has been made more clear to me as I have gone through his papers. I know, therefore, how much he would have welcomed honorary membership of the Association which you head.

On behalf of his family I would like to thank you for this last honour and I hope you will extend our thanks to your colleagues.

Peter Kilner
Rutland House
41 Davenant Road
Oxford

ANNOUNCEMENTS

The Nomenclature Committee announces that reprints of the article "A classification of cleft lip and cleft palate" (*Plastic reconstr. Surg.*, 29, 31, 1962) are still available. Requests for no more than 10 copies are filled at no charge; a rate of 10 cents per copy is assessed for numbers of copies in excess of 10. Orders should be sent to:

William R. Harkins, D.D.S.
Fulton Building
Osceola Mills, Pennsylvania

The Abstracts Committee is having difficulty in providing comprehensive coverage of current literature. To assist the members in their efforts, authors are invited to either send reprints of recent publications for abstracting purposes in the *Cleft Palate Journal* or to send an abstract already prepared. Either should be sent to the Abstracts Editor:

Dr. Kenneth R. Lutz
School of Dentistry
Loma Linda University
Loma Linda, California

Back issues of the *Cleft Palate Bulletin*, Volumes I through XIII, are available for purchase. Copies of a bound volume (including Volume I through VIII) are available at \$7.50 each. Unbound copies of Volumes IX through XIII are \$4.00 per volume. Orders should be sent to the Secretary-Treasurer, Dr. Charlotte G. Wells, 106 Parker Hall, University of Missouri, Columbia, Missouri 65202.

The establishment of the National Referral Center for Science and Technology is announced. The Center does not answer technical problems directly, but rather refers the inquirer to those who may be able to assist. More specifically, the Center lists, in answer to an inquiry, information centers, special libraries, governmental agencies, professional societies, industrial laboratories, abstracting services, and individual specialists who may be able to supply the information. Requests for referral service should be made to the Center (by full name), Library of Congress, Washington, D. C. 20540.

The National Foundation-March of Dimes announces a new publication *Birth Defects: Abstracts of Selected Articles*. This is a monthly compilation of selected articles related to birth defects published in periodicals in this country and abroad. Over 2,600 journals are included

in the literature research. About 45-55 significant articles are abstracted every month for inclusion in the publication. The subject of birth defects is interpreted to include broadly morphological and functional defects of congenital origin. Both clinical and experimental studies are included. Articles in the basic sciences related to birth defects, such as epidemiology, embryology, teratology, biochemical genetics, cytogenetics, medical and population genetics are also covered. The emphasis is on the human and clinical. Calendar year subscription: \$5.00. Vol. I, No. 1 was January, 1964; subscriptions entered now will begin with January issue while supplies of first issues last. Correspondence and subscription orders should be addressed to:

The National Foundation
Supply Division, Room 555
800 Second Avenue
New York, New York 10017

Time and Place for Future ACPA Meetings

1965—May 20, 21, and 22 New York City at the Americana
1966—April 14, 15, and 16 Mexico City at the Maria Isabel (convention headquarters) and at the Del Prado
1967—April 13, 14, and 15 Chicago at the Palmer House

The Mayo Foundation, Rochester, Minnesota, announces that applications are now being accepted for twelve-month predoctoral and postdoctoral fellowships in speech pathology. These are made possible by a grant from the National Institute of Neurological Diseases and Blindness. The predoctoral program is designed to allow students in the final year of doctoral study at other institutions to carry out research studies for the dissertation, obtaining data pertaining to medically related speech, voice, and language problems from a large and varied patient population in the Mayo Clinic and two associated general hospitals. It also enables them to secure clinical experience in evaluation and therapy under supervision. The postdoctoral program will permit fellows to pursue individual research and clinical interest within wide areas of choice. Both the pre- and postdoctoral programs are designed to introduce fellows to clinical problems and research techniques in allied clinical fields (neurology, physical medicine, otology, plastic surgery, pediatrics, dentistry, radiology, neurological surgery, ophthalmology, and neuro-physiology) through lectures, seminars, and assignment for given periods of time to the sections concerned. Fellowships are available beginning July 1, 1964, but they may be initiated at any time to meet the needs and convenience of the individual applicant. Complete information can be secured from Frederic L. Darley, Ph.D., Mayo Clinic, Rochester, Minnesota.

The Dental Department of the Hospital for Sick Children, Toronto, Canada, invites applications for a Clinical Studies Fellowship in Orthodontics at the Maxillo-Facial Clinic. This is a one-year appointment for research studies in clinical orthodontic treatment for severe cranio-facial deformities. Address applications to: Chief of Dentistry, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario.

Planning has begun for the 1966 ACPA meeting in Mexico City. The committee for local arrangements for that meeting has been appointed and many of the preliminary details have been worked out. The committee is as follows:

Robert F. Sloan, B.A., chairman
 Fernando Monasterio, M.D., guest co-chairman
 Norman R. A. Alley, D.D.S.
 Raymond O. Brauer, M.D.
 Kenneth R. Bzoch, Ph.D.
 Sanford Glanz, M.D.
 Elise Hahn, Ph.D.

A surgical conference with international attendance is to be sponsored by the Czechoslovak Association of Plastic Surgery and the Czechoslovak Academy of Sciences in cooperation with the Czechoslovak Medical Society of J. E. Purkyne—Section of Surgery and the Slovak Academy of Sciences. The Conference will be held in Bratislava on June 28 to July 1, 1965, and will concern two major topics: surgery of congenital deformities and new trends in experimental plastic surgery. There will be sections for practitioners in plastic surgery, pediatric surgery, cardio-surgery, neurosurgery, and general surgery. Plastic surgeons from all countries are cordially invited to take part. Participants are urged to submit advance registration and lecture title no later than November 15, 1964. Address all inquiries to: Administration Office of Congress, To the Secretary/General Doc. Ladislav Kuzela, M.D., C.Sc., Partizanska 2, Bratislava, Czechoslovakia.

The Secretary-Treasurer of the Association announces that balloting for the amendments proposed to the ACPA Constitution closed on October 19, 1964; and the ballots have been counted. According to a verified count, the results of the voting are as follows:

a) On Article IV—The Officers: To change Article IV to read “The officers of the Association shall consist of a president, a president-elect, a vice-president, a vice-president-elect, a secretary-treasurer, an editor, and an historian. With the exception of the secretary-treasurer and the editor, who are to be elected every three years, one year in advance of

taking office, and the historian, who is to be elected every five years, the officers are to be elected annually by ballot by members of the Association convened at an annual meeting or by a special meeting convened upon the direction of the Executive Council."

In favor—430

Against—4

b) On Article XII—Committees: To change Article XII, Section 2, to read "The Membership Committee shall consist of six persons, appointed by the president and approved by the Executive Council, to represent medicine, dentistry, speech, and three members-at-large. . . ."

In favor—418

Against—15

Abstaining—1

The University of North Carolina School of Dentistry announces the activation and/or continuation of Graduate Studies leading to the M.S. Degree in Dentistry in the disciplines of orthodontics, pedodontics, periodontics, and prosthodontics. Information regarding the programs can be obtained on request to the various chairmen of the departments.

The publication of a new periodical, the *Journal of Oral Therapeutics and Pharmacology*, is announced. A bimonthly, the *Journal* publishes papers concerned with all aspects of investigation in the fields of oral therapeutics and pharmacology, both clinical and/or basic in nature. Subscriptions are \$12.00 and may be obtained by order to the Subscription Department, The Williams and Wilkins Company, 428 East Preston Street, Baltimore, Maryland 21202.

The International Association of Logopedics and Phoniatries announces the Thirteenth Congress in Vienna, August 23–29, 1965. The major topics to be considered in the scientific program are retarded language development, stuttering therapy, and spastic dysphonia. Make inquiries to Sekretariat: 4, Alserstrasse, Vienna IX.

The Children's Bureau announces the publication of Bulletin No. 17, *Research Relating to Children*. The issue covers research reported to the Children's Bureau Clearinghouse from February 1963 through February 1964. Bulletin No. 17 (or earlier issues) are available for purchase for seventy-five cents from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

Members of the American Cleft Palate Association who may wish to

visit cleft palate centers or programs in or near New York City before or after the annual meeting may secure information regarding these activities from the 1965 local arrangements committee by writing to:

Dr. I. Kenneth Adisman
100 Central Park South
New York 19, New York

The first issue of an interdisciplinary quarterly in the field of community mental health is to appear early in 1965. The *Community Mental Health Journal*, which has been founded to facilitate communication among professionals in the field, will publish articles on research and evaluation, program developments, and theoretical views. Editorial policy will initially be flexible so as to represent all phases of this accelerating movement. The Board of Editors are: Sheldon R. Roen, Ph.D. (Editor); Erich Lindemann, M.D., Ph.D.; Lenin A. Baler, Ph.D., S.D. in Hygiene; and Saul Copper, M.A. Nationally known figures, representing a variety of disciplines and subspecialties, have agreed to serve as Consulting Editors. Further information can be obtained from the Managing Editor, *Community Mental Health Journal*, 12 Dimmock Street, Quincy, Massachusetts 02169.

The 53rd Annual Session of the Federation Dentaire Internationale will take place in Vienna under the patronage of the Federal President of Austria from June 26 to July 3, 1965. The most modern facilities will be available in all conference halls in order to ensure simultaneous translations of all scientific lectures into English, French, and German. In the course of the scientific meeting, the following main subjects will be discussed by renowned experts from all over the world: a) improvements of the endodontic therapy; b) functional and prosthetic rehabilitation of mastication ability; c) dental diseases and complete organism. It is also intended to have professional film shows, demonstrations, etc. Social activities will be planned. Application forms for the participation at the session may be obtained through the Organization Committee of the 53rd Annual Session of the Federation Dentaire Internationale, Weihburggasse 10-12, Vienna, I.

Progress in research on dental caries, periodontal disease, calcification, congenital anomalies, and oral ulcerations is described in a new booklet, 'NIDR Reports on Dental Research', just released by the Public Health Service, Department of Health, Education, and Welfare. In the reports on basic and applied research supported and conducted by the National

Institute of Dental Research, there are included an account of enzyme mechanisms in scurvy, a description of an organism which produces periodontal disease in hamsters, an electron microscopic study of developing tooth enamel, and a report on the relationships of frequency of eating to tooth decay. The National Institute of Dental Research, one of the nine National Institutes of Health, has an annual budget of approximately 20 million dollars, more than three-fourths of which is expended for grants to support dental research and train dental researchers in some 125 universities. 'The oral diseases and deformities which plague mankind will, we expect, yield ultimately to research efforts,' states Dr. Francis A. Arnold, Jr., Director of the National Institute of Dental Research, in the preface of the 32-page booklet. Dr. Arnold's statement at congressional hearings on appropriations for fiscal year 1965 summarizes the Institute's background, places research accomplishments in perspective, and visualizes problems which might be expected as dental research continues to expand. Part II of the brochure describes briefly 28 examples of basic and clinical research reported within the past two years. Of the total, 10 represent research reported by grant-supported investigators in nine research institutions in various parts of the United States and 18 are research reports by the National Institute of Dental Research scientists. Single copies of the booklet, Public Health Service Publication No. 1244, are available from the Information Office, National Institute of Dental Research, Bethesda, Maryland.

Dr. Herbert Conway has announced that a Cleft Palate Workshop and Registry will be established at The New York Hospital-Cornell Medical Center through a generous grant from The Heckscher Foundation for Children. All of the personnel of the cleft palate clinic will be employed in the activities of the Workshop but the major burden of responsibility will rest with a research-statistician and a research fellow who will analyze and compile complete data on every case of cleft palate which has been cared for in the past 30 years. This information will be recorded on data processing information cards so that by the use of a computer extensive and elaborate cross-information can be made available on a few minutes' notice. This work is being carried out in association with the Birth Defects Center of the Pediatric Department of The New York Hospital-Cornell Medical Center, the activities of which are supported by The Greater New York Chapter of The National Foundation.

News Note

An article entitled 'Cleft Palate in a Dog', by Bleicher and associates, appeared in the last issue of CPJ. The following news item, appearing in the *Iowa City Press-Citizen* in December, is relevant to that article.

Dog With Cleft Palate Is Missing

Studio City, Calif. (AP). Willie, who people say is a most unusual beagle, is lost.

How will you know if you find him? Listen.

Willie, described as one of the only two dogs in the nation with a cleft palate, barks: 'Darf, darf, darf.'

Judith Bokelman said Sunday that a gardener left a gate open and her two-year-old pet scampered off.

He was under treatment as an out patient following surgery at the UCLA medical center when he made good his escape.

Lab Director Norman Bleicher said that dogs born with a cleft palate seldom live long, and that scientists hoped to learn new methods of treatment by studying Willie, and, eventually, his offspring.

Anyone with a replacement for Willie may want to contact Mr. Bleicher (Ed.).

OFFICERS OF THE ASSOCIATION, 1964–1965

President Betty Jane McWilliams, Ph.D. Pittsburgh, Pennsylvania
President-Elect Peter Randall, M.D. Philadelphia, Pennsylvania
Past President J. Daniel Subtelny, D.D.S. Rochester, New York
Vice-President Kenneth R. Bzoch, Ph.D. Gainesville, Florida
Vice-President-Elect Elise Hahn, Ph.D. Los Angeles, California
Secretary-Treasurer Charlotte G. Wells, Ph.D. Columbia, Missouri
Editor Hughlett L. Morris, Ph.D. (1967) Iowa City, Iowa

COUNCIL MEMBERS OF THE ASSOCIATION 1964–1965

The above officers and

Norman R. A. Alley, D.D.S. (1966), Coral Gables, Florida
Lester M. Cramer, M.D. (1967), Rochester, New York
Michael L. Lewin, M.D. (1965), New York, New York
Mohammad Mazaheri, D.D.S. (1966), Lancaster, Pennsylvania
Ross H. Musgrave, M.D. (1967), Pittsburgh, Pennsylvania
Harry Z. Roch, D.D.S. (1965), Great Falls, Montana

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Budget

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William R. Laney, D.M.D.
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Peter Randall, M.D.

By-Laws

Asa J. Berlin, Ph.D. (Chairman)
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Richard C. Webster, M.D.
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Lawrence F. Quigley, D.M.D.
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Sanford Glanz, M.D.
Ivan B. Prince, D.D.S.
Arthur G. Ship, D.M.D., M.D.
Robert F. Sloan, B.A.

Local Arrangements (Mexico City)

Robert F. Sloan, B.A. (Chairman)
Fernando Monasterio, M.D., (Guest Co-Chairman)
Norman R. A. Alley, D.D.S.
Raymond O. Brauer, M.D.
Kenneth R. Bzoch, Ph.D.
Sanford Glanz, M.D.
Elise Hahn, Ph.D.

Long Range Planning

President (Chairman)—Betty Jane McWilliams, Ph.D.
President-Elect—Peter Randall, M.D.
Vice-President—Kenneth R. Bzoch, Ph.D.
Past President—J. Dan Subtelny, D.D.S.
Secretary-Treasurer—Charlotte G. Wells, Ph.D.
Editor—Hughlett L. Morris, Ph.D.
Ross H. Musgrave, M.D.
Mohammad Mazaheri, D.D.S.

Membership

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George F. Crickelair, M.D. (1965)
Edward F. Lis, M.D. (1966)
H. Cameron Metz, Jr., D.D.S. (1967)
Gene R. Powers, Ph.D. (1967)
Galen W. Quinn, D.D.S. (1966)

Nomenclature

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Asa J. Berlin, Ph.D.
Robert L. Harding, M.D.
Richard M. Snodgrasse, Ph.D.

Nominating

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John W. Curtin, M.D.
Herold Lillywhite, Ph.D.
Peter Randall, M.D.
J. Dan Subtelny, D.D.S.

Program and Short Course

Kenneth R. Bzoch, Ph.D. (Chairman)
Samuel Berkowitz, D.D.S.
Bertram E. Bromberg, M.D.
Eugene Gottlieb, M.D.
Elise Hahn, Ph.D.
Ross H. Musgrave, M.D. (ex-officio)
Morton S. Rosen, D.D.S.
Donald W. Warren, D.D.S.

Public Relations

Thomas D. Reese, M.D. (Co-Chairman)
Richard B. Stark, M.D. (Co-Chairman)
Mary Jane Koop, Ed.M.
Mohammad Mazaheri, D.D.S.

Time and Place

William H. Olin, D.D.S. (Chairman)
Thomas R. Broadbent, M.D.
Donald T. Counihan, Ph.D.
Samuel Glossman, D.D.S.
Francis W. Masters, M.D.
Kenneth L. Moll, 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.

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 orientation. He must be accredited in his professional field, and he must have displayed an interest in the rehabilitation of cleft palate persons. The above statement has been interpreted to mean that those applicants trained in Speech Pathology and Audiology must hold at least basic certification from the American Speech and Hearing Association at the time of the application.

The person shown as sponsor on the application must be a member of the Association and must write a letter attesting to the fact that the applicant is eligible for membership.

Send applications or requests for further information to:

CHARLOTTE G. WELLS, PH.D.
Secretary-Treasurer
American Cleft Palate Association
Parker Hall, University of Missouri
Columbia, Missouri 65202