# **BOOK REVIEWS**

Fifty Years of Research 1917–1967. Iowa City: The University of Iowa Institute of Child Behavior and Development, 1967. Pp. 129.

This is a list of the scholarly and major popular publications that have emanated from the Institute of Child Behavior and Development at The University of Iowa since the establishment of the Institute. The titles are presented in three groupings: scholarly publications, student theses and dissertations, and popular and service publications. Nearly two thousand entries are made in all. In addition, an author index is provided.

The bibliography is of particular interest to those individuals who are familiar with the Institute, its history and its activities. Its value is more general, however, in the contribution it makes as a resource to all professional people who are interested in the growth and development of the human.

The bibliography is meticulously prepared and well-organized and presented. In my opinion, we need more efforts of this kind and quality in many aspects of the health related professions.

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Fairbanks, Grant, Experimental Phonetics: Selected Articles. Urbana: University of Illinois Press, 1966. Pp. 274. \$6.50.

The major portion of this book consists of a collection of 28 articles by the late Professor Grant Fairbanks, representing his major contributions to the area of speech science. The articles are organized under six general topics: (a) the speech mechanism as a servosystem, (b) speech rate and the listener, (c) the specification of the vowel, (d) signal detection and intelligibility, (e) characteristics of voice during normal and emotional speech, and (f) organogenesis in articulation. In addition, the appendixes present a complete bibliography of the published work of Professor Fairbanks, a list of graduate theses which he directed, an article entitled "Speech and Hearing Science", and his 1963 Communication Sciences Seminar lectures.

Although all of the articles presented in the main body of the book have been published previously, the collection of them in one place, organized by topic, has some distinct advantages. The reader gains a realization of the significance of Professor Fairbank's scientific contributions, the breadth of interest which characterized his work, and a historical perspective on the development of knowledge concerning the human communication processes.

Of particular interest to this reader are two items in the appendixes. The article "Speech and Hearing Science", which was co-authored by Professor Fairbanks and the late Gordon Peterson, is a classic contribution. The philosophy developed in this paper is that speech and hearing science is the discipline which underlies various applied fields such as speech pathology and audiology. This philosophy has had, and undoubtedly will continue to have, a substantial effect on development of training programs in various areas of communication.

The Communication Sciences Seminar lectures of Professor Fairbanks have not been published previously. They represent a series of papers in which he attempted to summarize research information, to point up future directions of research, and to express his own basic philosophy concerning science. The presentation of these lectures probably is the most unique and important contribution made by this book. The insights which are provided of the thinking and the philosophies of a pioneer researcher in speech and hearing science should be extremely valuable to present and future workers in this field.

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Kraus, B. S., Kitamura, H., and Latham, R. A., Atlas of Developmental Anatomy of the Face. New York: Harper and Row, 1965. Pp. 378. \$20.00.

One of the major difficulties of research in human teratology is the dearth of information on human embryos at the stages when malformations are occurring. This volume is a welcome addition to such knowledge. From a collection of some 25,000 aborted embryos, a sample of 35 with clefts of the lip and/or palate and 39 without clefts were selected. Thirteen prenatal stages are represented in the noncleft series, ranging from 35 days to 20 weeks. To provide information about developmental variability for a given chronological age, some thirty specimens were examined at each age grade and, of these, three representative ones were chosen for presentation.

For each specimen six frontal sections are portrayed, chosen in a standard way so that comparisons can be made of the same anatomical area in different age groups. There are photographs of each specimen (not all of top quality), and diagrams showing where the sections were taken from. A low-power view ranging from a magnification of  $\times 35$ , in the smallest embryos, to  $\times 3$ , in the largest, and a higher-power detail of the nasal septum and palate area ( $\times 60$  to  $\times 12$ ) are provided in each case. Most of the sections were stained with Masson's trichrome stain, to which the black and white photographs do not do justice. An attempt was made to present comparable areas in the embryos with clefts, although this proved

difficult because of the considerable distortion of facial anatomy resulting from the defect.

Of the 35 cleft embryos, 19 had associated defects, and these are illustrated by photographs in Division III of the volume. This is the least useful section of the Atlas, as the photographs do little else than demonstrate that the malformations do indeed exist.

The fourth section is a "Special Topics" Division which illustrates, in some detail, the existence of epithelial pearls in the plane of the secondary palate, at the junction of primary and secondary palate, in relation to the degenerating naso-palatine ducts, in the dental buds, and in the free edges of the palatine shelves in embryos with cleft palates (both with and without cleft lips). Dental anomalies in fetuses with cleft lip and palate are also illustrated in this section.

Finally, normal nasal and primary palate development are represented by sections from a 33 and a 35 day fetus, and closure of the secondary palate is summarized in a series of drawings. A bibliography of literature on prenatal development of the face and on cleft lip and palate provides a useful starting point for the prospective researcher in orofacial development.

Wisely, the authors have reserved their own speculations and hypotheses for presentation in separate papers rather than in a book that "purports to illustrate, not to convert", and the reader can form his own interpretations of the material.

The most interesting embryos are, of course, the youngest ones. The earliest normal specimen, 33 days of age (estimated by crown rump length and Streeter's horizons), must have been in excellent condition when fixed. The earliest specimen with a cleft lip (41 days) showed rather severe postmortem changes, and it is difficult to draw any conclusions about the origin of the cleft from the few sections presented. It is noteworthy that the shelves of the secondary palate are still lateral to, but above, the tongue in the 45 day embryos. Later, in the 47 day specimens, the tongue touches at points along the shelves' length. Obviously, it would be impractical to present in such an Atlas all the material to be obtained from the embryos; those who wish to study them further are invited to do so at the Cleft Palate Research Center, University of Pittsburgh.

The authors are to be congratulated for their industry in providing this useful contribution to knowledge of normal and abnormal human facial embryology.

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ROUSEY, C. L., and MORIARTY, ALICE F., Diagnostic Implications of Speech Sounds. Springfield: Charles C Thomas, 1965. Pp. 156. \$7.75.

The authors of this book state that "the purpose of the present report is to present a theoretical formulation of the meanings which may be associated with the sounds used in verbal language and to evaluate clinically postdictions of early developmental experiences, difficulties and conflicts". Basically, the book is a report of a research project completed by the authors.

The book consists of seven chapters, with various sub-headings in each chapter. Chapter I is the Introduction; Chapter II, Theories About Development and Uses of Speech Language; Chapter III, The Formulation of Working Assumptions in the Present Study; Chapter IV, Method of Study; Chapter V, Results of the Study; Chapter VI, Application of the Working Assumptions; and Chapter VII, Summary and Implications.

One of the authors (Rousey) formulated 17 assumptions, all very psychoanalytic in nature, concerning the manner in which speech sounds and vocal behavior reflect man's sexual and aggressive drives and his ability or inability to establish satisfactory relationships with his fellowman. The assumptions concerning the significance of distorted vowels is based on the assumption that "the vowels are conceived as capable of transmitting man's sexual and aggressive drives". For example, "restriction of range of the voice occurs in individuals whose normal expression of the sexual drive is constricted by emotional factors"; and "deviation from culturally accepted pitch levels is associated with a distorted sense of sexual identity".

In regard to consonants, they "are considered to transmit the nature and quality of defensive behavior which the individual utilizes in establishing relationships". Examples of assumptions here are: "A whistle sound accompanying articulation of the /s/ phoneme reflects anxiety in interpersonal relations"; and "deprivation of early oral needs is reflected in the manner of articulation of the /l/ phoneme". The author has made other assumptions based on the clinical significance of disturbed functioning of the speech mechanism, neurological status, sound rejection, and "clinical inferences possible from speech and hearing evaluations".

The methodology of the study consisted of interviews and tests of 24 prepuberty aged children by the speech pathologist (Rousey). He conducted an audiological assessment, a measure of auditory discrimination, examination of the peripheral speech mechanism and an articulation test, which also allowed for evaluation of voice quality. Following this, Rousey made the psychological postdictions for each child. Moriarty, a psychologist, then took advantage of previous data and information already available on each child and made assessments and ratings on all the previously made postdictions. The results indicated that of the postdictions made (233) 83% were judged to be correct.

In looking at this somewhat significant percentage one could easily be misled. First, the study as a research project was weak and extremely "unscientific". The authors appeared to be well aware of this and attempted

to justify it with many qualifications. The project was carried out essentially by the two authors. Only one person did all the speech diagnostic testing, and only one person rated the postdictions. I do not deny the sophistication of both research participants, but this, nevertheless, does not decrease my concern over their inability to satisfy the criteria of reliability and validity of their individual research findings. I wonder also how Dr. Rousey was able to eliminate from his consideration, regarding his postdictions, any statements made by the children during the diagnostic interview. If perchance these statements did play a significant part in the determination of his postdictions, then one must question the "diagnostic implications of speech sounds".

Secondly (and here I present a personal bias), the working assumptions seemed to be based on other assumptions. I am somewhat skeptical of the psychoanalytic assumptions and their lack of empirical evidence. From the psychoanalytic literature and from the evidence presented here it would seem that all manifestations of human behavior must at one time or another revert to sex. However, even in view of these criticisms, this book does present an interesting concept, especially as it relates to voice quality. The fact that this is an initial attempt to relate speech defects to expressions of sexual drive, aggression, and interpersonal relationships, would in and of itself demand its reading by all those interested in research on the subject.

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# **ABSTRACTS**

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Adams, M. S., and Neel, J. V., Children of incest. *Pediatrica*, 40, 55-62, 1967.

Eighteen children who resulted from esrelationships, tablished incestuous brother-sister and 6 father-daughter matings, were studied and matched as closely as possible with a comparison group of unwed mothers who were under the care of the same agencies as the incest group. Data relating to the familial backgrounds, I.Q. of the participants, and general physical characteristics were evaluated. The frequency of death-plus-major defect in the incest children was 6 in 18, and in the comparison group 1 in 18. Seven of the incest children were normal at their 6 month

checkup with I.Q. 98 to 119 (average 110), 3 were dead (one with pulmonary hyaline membranes, one from an acute febrile illness superimposed upon glycogen storage disease, and one who died 6 hours post partum and had a nondiagnostic autopsy). Two children of incest were severely retarded mentally and had seizure disorders and spastic cerebral palsy requiring institutionalization; three others were retarded to a lesser degree. Anomalies found in the children of incest included horseshoe kidney, bone defects in the parietal-occipital area, bone age retardation (2 instances), bilateral internal strabismus, tibial torsion, and acetabular dysplasia (2 instances). One caucasian male child having a bilateral cleft lip defect but no other anomaly resulted from a father-daughter mating. All of the comparison group of 18 children were alive at the end of 6 months. Defects in the comparison group included a branchial cleft cyst, unilateral cryptorchidism. bilateral inguinal herniae (male), and ptosis of the left eye. The I.Q. of these children ranged from 91–133, averaged 105. The authors present a brief resume of the literature discussing consanguinity in Japan and compare the results with the present circumstances. They estimate that 20 incestuous pregnancies occur in Michigan annually and point out the important genetic information which can be obtained from a study of such material. (Greeg)

Nagai, I., Tsuji, T., Machida, J., Sato, M., Mimura, T., Sakuda, M., Yamauchi, K., Sakuda, M., Okono, Y., and Sato, S., A case with midline cleft of the lower lip, mandible and tongue. J. Japanese Stomatological Society, 16, 505-512, 1967.

A 22-vear-old female with median cleft of the lower lip and mandible was admitted to the Osaka University Dental School Hospital. The patient presented also ankyloglossia and median neck contracture. Examinations were performed on the case by methods of cinefluorography, electromyography and cephalometry. The efficiency of mastication was also measured. Results of these examinations were discussed. The patient was treated as follows: a) bone grafting on the mental region to combine and fix both fragments of the mandible, b) plastic operation for anomaly of the neck, c) ankylotomic for the short frenum of the tongue, and d) prosthetic treatment for the missing teeth on the frontal part of the mandible. The treatments have brought satisfactory effects on the functions of the mandible and on her appearance. (Machida)

Honjo, I., Importance of degree of velopharyngeal incompetency in cleft palate speech. Practica Otologica (Ky-oto), 60, 865-881, 1967.

Using a series of transducers, amplifiers and a recorder, intra-oral air pressure (P1), intranasal air pressure (P2), nasal air flow rate (U) were measured to compute the nasal resistance (R): R = 980 (P1 − P2)/U dyne sec/cm<sup>5</sup>. Various sizes of plastic catheters were inserted to the velopharyngeal portions of eleven normal adult males in order to investigate the effects of velopharyngeal incompetency to articulation and to the nasal resistance. It was found that, when the diameter of the catheter was more than 7 mm and the nasal resistance was less than 20 dyne sec/cm<sup>5</sup>, hypernasality and distortion of consonants (plosives and fricatives) were apparent. Further, the nasal resistance and articulatory performances were studied on fortynine post operative cleft palate cases. Those who were judged having excellent speech showed the nasal resistance of more than 50 dyne sec/cm<sup>5</sup>. In classifying cleft palate speakers, both the degrees of velopharyngeal incompetency and articulatory habits should be considered. The author concluded that the value of the nasal resistance was a good index in judging the degree of velopharyngeal incompetency. (Machida)

Wood, N. K., Wragg, L. E., and Stuteville, O. H., The premaxilla: embryological evidence that it does not exist in man. *Anatomical Record*, 158, 485–490, 1967.

The authors restate the theories concerning the number of ossification centers within the premaxilla. These include: 1) no ossification center; 2) one center bilaterally; 3) two centers bilaterally; and 4) multiple centers bilaterally. The authors note that only two photographs have been published to show separate ossification centers.

They report examination of 90 embryonic specimens ranging from 16–32.2 mm CRL (crown rump length). In specimens varying from 16-17.2 mm CRL, they noted no osteoid tissue in the maxilla. In specimens 16-21 mm CRL, only one showed osteoid tissue in the maxilla and this occurred bilaterally in the cuspid region. In specimens 18-23 mm CRL, maxillary ossification was beginning in all but one with no evidence of separate maxillary and premaxillary centers. In 10 of 11 specimens, 23.4-27 mm CRL, the maxilla revealed a solid lamina of ossification extending from the bicuspid to the central incisor region. All 17 specimens, 32-32.2 mm CRL, demonstrated a single lamina of ossification extending from the bicuspid to the central incisor region. No evidence of a "suture line" was observed along the solid lamina between the maxilla and premaxilla.

The authors conclude: 1) a single ossification area appears as a lamina which extends from the molar to the incisor region; 2) there is no separate ossification center for the premaxilla and therefore no premaxilla in man. (Weeks)

Shelton, R., Knox, A. W., Arndt, W. B., and Elbert, Mary, The relationship between nasality score values and oral and nasal sound pressure levels. J. speech hearing Res., 10, 3, 549–557, 1967.

By means of a pair of microphones, one of which measured acoustic energy from the mouth, the other of which was inserted into one naris, it was possible to tape record the oral and nasal acoustic energy for 31 subjects. The experiment was designed to investigate the relationship between scores of nasality as obtained from a panel of judges and the acoustic sound pressure level readings obtained from the recordings from these two microphones. Twelve judges rated the five-second samples from the subjects on the basis of a nine-point equal-appearing interval scale. Relatively low correlations were found between the physical measures and the psycho-physical judgments. The authors concluded that the relationship between measurements of nasality and SPL measures is not great enough to warrant the use of this procedure as a diagnostic indicator of nasality. (Fricke)

## Ringel, R. L., and Fletcher, Hilary M., Oral perception: III. Texture discrimination. J. speech hearing Res., 10, 3, 642-649, 1967.

By the psycho-physical method of magnitude estimation, normative data for texture discrimination in the oral region were reported. Six different grits of emery cloth were used as the stimulus material, and the subjects were asked to estimate the smoothness of the sample by giving a numerical value to their texture discrimination. The results were reported in terms of power function exponents for the various oral structures used in evaluation. The author concluded that all of the structures evaluated appeared "capable of making relatively accurate textural discrimination". (Fricke)

## Barnes, Ida J., and Morris, H. L., Inter-relationships among oral breath pressure ratios and articulation skills for individuals with cleft palate. J. speech hearing Res., 10, 3, 506-514, 1967.

The stated purpose was to investigate the relationships among several manometer ratios and several measures of articulation skill. Procedurally, 85 individuals with congenital clefts of the lip and/or palate were used as subjects. Positive and negative manometer readings with and without bleed were obtained on the Hunter Oral Manometer. Eight different articulation measures were utilized and measures of I.Q. and hearing acuity were also taken. The results indicated that of the pressure ratios, the positive bleed readings correlate highest to the various measures of articulation skill. The articulation measure which resulted in a score for plosive phonetic elements correlated high with the pressure ratios and the stimulation test (the total number of fricative and plosive sounds which were produced correctly following auditory-visual stimulation, plus the number of fricative and plosive sounds which had been produced correctly anywhere in the regular articulation test) was shown to be the measure which correlated the highest with both articulation scores, and it was considered "to most clearly reflect ability to achieve velopharyngeal closure in speech". (Fricke)

Chase, R. A., Expanded clinical and research uses of composite tissue transfers on isolated vascular pedicles. American Journal of Surgery, 114, 222–227, 1967.

The transfer of relatively large size composite tissue islands on large vascular pedicles is described and illustrated. This includes a modification of the Wardill palate pushback procedure and coverage of the nasal aspect with a vascular pedicle flap from the anterior palate. One section of the article only deals with the application of this technique in palatal surgery. (Berner)

Mazaheri, M., Harding, R. L., and Nanda, S., The effect of surgery on maxillary growth and cleft width. Plastic reconstr. Surg., 40, 22-30, 1967.

Reduction of palatal cleft width after lip repairs has been observed clinically but has not previously been demonstrated definitively. The actual, as opposed to possible, mechanisms involved have not hitherto been identified. Based on radiographic measurements and study of serial oral casts in 24 children the authors verified the clinical observation. With somewhat less clarity the mechanisms are shown to be the establishment of an intact circumoral muscle complex and growth of the palatal shelves. The observation is made that the surgery performed did not seem to have a disturbing growth effect on the bimaxillary and bituberosity widths even though the surgery was performed early (prior to 18 months). Comparison of bituberosity mean values in the cleft group with normals at comparable age levels indicated greater size in the latter suggesting generalized growth impediment in the cleft group. (Cosman)

## Stenström, S. J., and Thilander, B. L.,

Facial skeleton growth after bone grafting to surgically created premaxillomaxillary suture defects: an experimental study on the guinea pig. *Plastic reconstr. Surg.*, 40, 1–12, 1967.

This animal study was begun in 1963 in an effort to evaluate the desirability of primary bone grafting in the cleft lip/ palate infant. The premaxillomaxillary suture line was extirpated in young guinea pigs. In one group the resulting defect was filled with autogenous bone grafts, in another group of litter mates the defect was left open and unoperated litter mates served as absolute controls. After a period of time and following periodic x-ray examination the animals were killed and the skulls examined. In all animals operated upon the upper incisor on the relevant side was lost. In all cases the defect was practically eliminated save for a narrow fissure in some instances. The snout was consistently slightly narrower on the operated side than on the intact side. Apart from this there was no appreciable difference in facial growth between animals with open defects and the unoperated controls. On the other hand, in those guinea pigs where the defect had been grafted the premaxilla deviated toward the side of the defect giving rise to definite asymmetry, a deformity most marked in the animals operated upon at the earliest age. While the authors are careful to distinguish between these animal results and the human situation the implications of their findings are obvious. (Cosman)

**Trauner, R., and Trauner, M.,** Results of cleft lip operations. *Plastic reconstr.* Surg., 39, 209–219, 1967.

This study of cleft lip procedures compliments a previous report by the authors (*Plastic reconstr. Surg.*, 39, 168–174, 1967)

on their cleft palate experience. In the past 18 years 170 cases of unilateral cleft lip were operated upon at the age of 3 to 6 months. A combination of the Tennison and Millard procedures is now used employing triangular flaps from the cleft side inserted both beneath the columella and above the lip-skin junction. Bone grafting of the alveolar cleft may be carried out at the time of the lip repair but the number of cases so treated is not stated. A good result, i.e., a lip symmetrical on both sides, even in form, and not too tight, was achieved in 82% of incomplete and 73% of complete cleft lips. 57 cases of bilateral clefts were operated upon. No premaxilla was repositioned. The technique of Veau was used and a single side closed at a time. 195 secondary operations were carried out in unilateral cleft lips and 78 procedures in bilateral cleft lips. Wider applicability of the authors' criteria for the assessment of their results might have been gained by presentation of cases illustrative of their categories. (Cosman)

**Fára, M., and Šmahel, J.,** Postoperative follow-up of restitution procedures in the orbicularis oris muscle after operation for complete bilateral cleft of the lip. *Plastic reconstr. Surg.*, 40, 13–21, 1967.

An attempt is made to establish the histologic structure of the unoperated prolabium and the lateral labial segments with special regard to the muscular tissue and to ascertain any changes which take place after suturing the two sides of the bilateral cleft lip. In the first phase of this investigation the mouth region of six stillborns with palatal-lip clefts were studied. In the second phase a vertical strip of tissue was taken from the edge or central part of the prolabium of 20 children during the suture of the first side of the bilateral cleft and a horizontally situated strip was secured from the same children at the time of the suture of their second side. In 11 patients undergoing late lip sulcus repair

strips of similar tissue were also obtained. No muscle fibers were found in the prolabia of the stillborn or of the living children prior to operation. Striated fibers were routinely found in the prolabia of operated children suggesting postoperative ingrowth from the labial lateral segments. This ingrowth was less marked centrally and in the late cases the central portion of the prolabium was shown to contain mostly connective tissue suggesting some regression of muscle tissue centrally. However some muscle fibers did remain in the tissue of the central segment; these were longitudinally arranged and together with collagenous fibers similarly distributed made a connecting link effectively restoring the circle of the sphincter oris. (Cosman)

Edgerton, M. C., Lewis, M. C., and Mc-Knelly, L. O., Lengthening of the short nasal columella by skin flaps from the nasal tip and dorsum. *Plastic reconstr. Surg.*, 40, 343–353, 1967.

The authors review the literature relative to columella lengthening in cleft lip as well as other congenital deformities and propose two new methods for accomplishing this end. The first technique, performed in 7 cases, consists of the transfer of a vertical midline flap of nasal dorsal tip on a vascular stalk preserved centrally via a midline tunnel beneath the alae and, after a 90° twist, insertion of the flap into the defect created by dividing and releasing the columella. The second method employs a trefoil flap based on the columella inferiorly and taking tissue from the dorsal nasal tip. In essence a V-Y advancement downward closes the nasal tip and adds to length and bulk of the columella. Performed 5 times this procedure has been associated with somewhat greater nasal scarring than the former. These techniques are ingenious and well diagramed although the accompanying photographs are less than convincing as to the cosmetic acceptability of these operations. (Cosman)

Bromley, Dora, and Burston, W. R., The Pierre Robin syndrome (the clinical management of newly born infants suffering from abnormally small mandibles and cleft of the palate). Nurs Times, 62, 1717–1720, 1966.

A review with emphasis on hospital care of affected infants. (Cleft Palate Journal/Oral Research Abstracts)

**Dumas, P., and Deplagne, H.,** Surgical correction of labio-nasal defect from bilateral cleft lip. *Ann. Chir Plast.*, 11, 166–169, 1966.

Secondary plastic repair of residual deformities several years after the original operation for double cleft lip is often necessary. The most common defects are atresia of the middle of the upper lip, absence of the columella, and spreading of nasal alae. A single-stage operation is proposed. The columella is reconstructed from the atrophic median portion of lip. The nasal alae are restored to normal position by Z-plasty. The upper lip is reconstructed by an Abbe flap. Pre- and postoperative photographs of 2 patients are shown. (Gootjes/Oral Research Abstracts)

Agroskina, A. P., The correction of lip and nose deformities left after cheiloplasty for bilateral cleft lip. Stomatologiia, 45, 58-61, 1966.

One hundred twelve patients, aged 7–35 yr, were treated during 1952–1964 for lip and nose deformities left after cheiloplasty. Thirty-two of these patients (15 males and 17 females, aged 10–30 yr) were operated on for bilateral cleft lip. Twelve of the 32 patients had a residual lip deformity only (group 1), 11 patients had both lip and nose deformities left (group 2), and in 9 patients there was also a severe underdevelopment of the maxilla and the upper lip (group 3). The treatment of group 1 patients consisted of plastic surgery. The surgical correction in group 2 and group 3, however, was preceded by orthodontic

treatment which widened the maxillary arch. The correcting operation for group 2 was carried out according to the method of Marks, Trevaskis, and Payne. Patients of group 3 were operated on according to Abbe because in this group an increase in the upper lip dimensions was also required. A follow-up for 5 yr showed that in one patient (of group 3) a keloid formed, and in another patient from this group some deformity was left in the ala nasi region. All other operations were successful. The best results in patients of group 2 and group 3 were achieved in the age group of 10-14 yr. (Shoshan/Oral Research Abstracts)

Karfik, V., Classification of rare congenital cleft defects of the face. *Rozhl Chir*, 45, 518-522, 1966.

An attempt is made to classify rare congenital defects of the face. This is becoming increasingly necessary for assessing progress and for choosing the method of treatment by plastic surgery. This classification is based on experience at a plastic surgery clinic in Prague and on the work of Burian. (Excerpta Medica/Oral Research Abstracts)

Hrivnakova, J., Tolarova, M., and Havlova, Z., Microforms and stigmata of clefts. *Rozhl Chir*, 45, 623–632, 1966.

Investigation of microforms and stigmata of cleft lip and palate was carried out. All deviations suggesting minute incomplete expression of the cleft were recorded in a large control population. The frequency data were obtained for cleft uvula, deviations in the morphology of the palate and upper jaw, atypical structures on upper lip, nasal deviations, anomalies of the shape, position, and number of teeth. The findings in the population are discussed in relation to the patients treated in the Prague Clinic of Plastic Surgery. (Cervenko/Oral Research Abstracts)

Suzuki, Y., Hayasaki, H., Kanzaki, J., Saito, A., and Hiroshimaya, T., A case of congenital oro-pharyngeal malformations with cleft palate. *Japanese J. Otol.* (*Tokyo*), 69, 1612–1615, 1966.

A four-year-old female with congenital oro-pharyngeal malformations was seen and treated by the authors. In this case, a membranous funicle existed connecting the posterior pharyngeal wall above the palate and the root of the tongue, through the cleft of soft palate. This funicle was removed and the cleft of soft palate was closed surgically. A cartilage plate was found inside the funicle. The authors considered that the funicle could be the remnants of the embryonic pharyngeal membrane and the persistence of the mesodermal remnants around the membrane. They also said that the funicle might have caused the cleft of the soft palate. (Machida)

**Dennis, C. G.,** Cleft palate speech. I. General considerations. II. A study of speech sounds. *Aust Dent J., 11, 13–19, 1966.* 

The use of the sonagraph—a speech spectrometer—is of practical value for both the detection of speech abnormalities in patients with cleft palate and the evaluation of the progress made during prosthetic treatment. The instrument records the frequency, intensity, and time analysis of short samples of speech fed into it either directly by a microphone or through a tape recorder. The form of a sound consists of varying intensities along its frequency range. The record (sonagram) is correlated with the results obtained from clinical examination of the patient, thus detecting the anatomical factors involved. The recording is repeated both during and after treatment. An adult patient with an unoperated cleft was characterized by a low frequency range in both vowels and consonants, a similarity of the vowel sounds, and a hypernasality caused by nasopharyngeal incompetence. Treatment of the palatal cleft by obturators reduced the nasal escape of sound, increased the frequency range of the vowels, and allowed greater variation in the formants (energy bars of the sound) of the vowels, thus rendering the speech more normal. (Halbreich/Oral Research Abstracts)

Gylling, U., and Soivio, A. I., Submucous cleft palates. Surgical treatment and results. *Acta Chir. Scand.*, 129, 282–287, 1965.

Of 1,315 cleft palates, 77 (5.8%) were of the submucous type; 76 of the 77 were treated by a so-called combined therapy, i.e., operation and speech training. This method is recommended on the basis of the positive results achieved in 88.1% of 1,315 cleft palate patients. Average age at operation was 8.4 yr. (Oral Research Abstracts)

Sgouras, N., Late aspects of cleft palate treatment. *Intern Surg.*, 45, 619–621, 1966.

A digest of a portion of a symposium on the surgical treatment of congenital deformities is presented. Current surgical practice in the repair of cleft palate is reviewed. Noting that the successful rehabilitation of the cleft palate child requires competent velopharyngeal function, the importance of the initial surgical procedure on the palate in attaining this result is considered. Most surgeons in the U.S. and abroad use 1 of 3 types of repair: Langenbeck's procedure, V-Y retropositioning with or without modification, or the Wardill push-back procedure. At 12-16 wk the lip and anterior portion of the hard palate are repaired. When alignment of the cleft segments is not considered ideal, the initial lip surgery is preceded by a period of maxillary orthopedics. A bone graft is then placed at the level of the alveolus at the time of lip repair or later. In the bilateral cleft palate patients, retropositioning of the premaxilla and fixation with a bone graft is considered the treatment of choice. Palatal repair is usually completed between 12–18 months. Pharyngoplasty at the time of palatal repair is not deemed necessary because of the small percentage of patients demonstrating velopharyngeal incompetence after surgery. When velopharyngeal incompetence develops at some later time, secondary operative procedures are indicated to restore adequate function. (Aduss/Oral Research Abstracts)

**Fara, M.,** The problem of primary suture of the lip in general bilateral clefts. *Rozhl Chir*, 45, 1–10, 1966.

Five hundred and six patients were treated surgically for total bilateral clefts of the lip, jaw, and palate. Total bilateral clefts formed 11.5% of the total number of cleft patients. Primary closure of the lip was performed using vertical skin scars, which take advantage of the dimple to form a separate middle part of the reconstructed lip. The best results were obtained by positioning the skin incisions to perform later corrections and supplementary operations in the best way possible. In most children surgical treatment was performed at the age of 4-6 months at which time the tissues had not lost their adaptation faculties. (Plackova/Oral Research Abstracts)

Muhler, G., and Ivankievicz, D., The importance of phoniatry and audiology in the rehabilitation of clefts of the lip, jaws, and palate. Fogorv Szemle, 59, 434-437, 1966.

Patients with clefts often have hearing disturbances. For their detection, children should be examined soon after birth (intensive acoustic irritation and observation of the reaction), at age 1 yr (examination of orientation reflexes), and at 3 yr (understanding of whispered speech from a distance). To obtain best results in understandable speech that does not display any marked difference from normal speech, closure of the velum cleft should be at age 6–8 months. Thereafter an upper plate is worn, and speech instructions are given

systematically. The cleft of the hard palate is not closed earlier than age 8–12 yr, to avoid blocking the transverse growth of the upper dental arch. (Adler/Oral Research Abstracts)

**Ross, R. B.,** Cleft lip and palate. *Appl. Ther.*, *8*, 694, 1966.

A brief generalized description is presented of the dental deformity associated with cleft lip and palate. The coordinated efforts of a cleft palate team are suggested for correction of the dental problems of the child with a cleft. (Aduss/Oral Research Abstracts)

Gosserez, M., Stricker, M., Dautrey, J., Present-day surgery of cleft lip. Rev. Laryng (Bordeaux), 87, 348-358, 1966.

The objectives and surgical treatment methods for incomplete and complete cleft palates are illustrated and discussed in regard to the timing of intervention. (Graf/Oral Research Abstracts)

Andra, A., Morphological results of 300 cleft-palate operations in 270 patients. Deutsch Stomat, 16, 481–488, 1966.

Of 330 cleft palate operations, 46.3% were unilateral total clefts through the palate and maxilla. The pedicle flaps have the best results; their use is also recommended in patients with unilateral cheilognathopalatoschisis. (Andreas/Oral Research Abstracts)

**Limborgh, J. Van,** The spontaneous growth of skulls with cleft jaw and palate. *Nederl T Geneesk*, 110, 281–285, 1966.

Nontreated fetal, neonatal, and adult skulls with various cleft malformations are described. The individual variations in the shape and position of the facial skeleton were considerably more pronounced in the fetal and neonatal skulls than in the skulls of adults. Among the latter group

of skulls, the anomalies in shape and position proved to be entirely dependent on the type of cleft malformation. In the presence of a median cleft, the anterior parts of the upper alveolar arch and the palate are narrow. In the unilateral cleft of the jaw and the palate, the most important finding was the retroposition of the lower portions of the maxilla, the palatine bone, and the pterygoid process on the side of the cleft. A complete bilateral cleft of the jaw and palate was accompanied by a nearly normal position of the facial bones. A solitary complete cleft of the alveolar arches and the pterygoid processes. These observations indicate that nontreated cleft-affected skulls develop along characteristic lines-dependent on the type of the clefts—and that these characteristic growth anomalies are probably secondary in nature. (Excerpta Medica/ Oral Research Abstracts)

**Bularska-Gallas, Z.,** Orthodontic treatment of cleft lip, alveolar process and palate. *Folia Med Cracov*, 8, 31–55, 1966.

Statistical results of recent studies indicate a constant increase in the number of children born with cleft lip, alveolar process, and palate. As a result, clinical centers are manifesting increasing interest in these anomalies. To determine the principles of orthodontic therapy of these anomalies, 350 patients treated since 1953 were studied. The etiopathogenesis of clefts, their classification, types of occlusal anomalies, and principles of clinical evaluation are reviewed. The selection of the proper time for surgical intervention is discussed, which should take into account the growth and developmental phase of the child, type of cleft, and form of occlusion. The method of Schweckendiek is favored, as it is most nearly physiological and provides a good solution of phoniatric, surgical, and orthodontic problems. Treatment of neglected patients, e.g. those with fixed primary and secondary anomalies, is dis-

cussed. Their treatment is prolonged and not always successful, so that special prostheses must be used. Rehabilitation of children with cleft lip, alveolar process, and palate should place greater emphasis not on the treatment of the deformities, but on their prevention, including early treatment. Prevention consists of early removal of the primary deformity, selection of the optimal time for surgical intervention, and continual compensation of disorders characteristic of each stage to prevent secondary deformities after operations. Early orthodontic treatment of different types of cleft is discussed in detail. Correct treatment requires cooperation of the orthodontist, surgeon, and phoniatrician and should be organized in rehabilitation clinics or clinical departments. Organization of the outpatient clinic for rehabilitation and the plan of polyspecialist treatment are described. (Excerpta Medica/Oral Research Abstracts)

Takahashi, Shojiro, and Kato, Katsuyuki, Functional return of tissue transplanted by Abbe-Estlander operation. I. Sensory and motor function. Bull. Tokyo Dent. Coll., 7, 183–201, 1966.

The return of motor and sensory function to tissues transplanted by the Abbe-Estlander technic was studied in 19 cleft-lip patients. Sensory function was determined by the application of cold, warm, touch, and pain stimuli-electromyograms were used to evaluate motor function. The order of appearance of sensory function was pain and touch (5 wk), cold (2 months), and warm (over 2 months) following initial surgery. Stimuli are first appreciated peripherally, and sensory areas are more densely distributed in the skin than in the vermilion. Electromyograms revealed motor unit voltages within 2 months. The recovery of normal motor and sensory function was almost complete after 1 year. (Emmings/Oral Research Abstracts)

Berendes, J., Logopedic aspects of surgical correction of speech insufficiency. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 183–192, 1964.

Secondary surgical procedures for palatopharyngeal incompetency are often necessary when the primary palatal operation does not result in acceptable speech. There are a number of technics available for diagnosing palatal incompetency, and these include listening to the patient's speech, measuring sound penetration through the nose, spectrographic analysis, and cineradiography. Successful secondary surgery does not always result in speech and speech therapy is required. The later a cleft is closed or secondary operation performed the more difficult it is to correct defects in articulation because incorrect patterns of speech become habituated. These patients are also unaware of the acoustic differences between their speech and that of normal individuals. Speech treatment involves making the patient aware of these differences. This can be done by taping and listening to speech. Treatment also includes relaxation exercises and sometimes further surgery. The speech result depends to some degree on the surgical method used. Tube pedicle flaps of the skin very seldom produce good speech results. The pharyngoplasty as a secondary procedure seems to achieve the best results (Warren/Oral Research Abstracts)

Link, R., ENT—Aspects of corrective operations of the palate. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 215–219, 1964.

Closure of cleft palate is important for hearing as well as for speech. Normal transmission of sound waves requires healthy eustachian tubes. Contractions of the tensor veli palatini, levator palatini, pharyngotubal, and cephalopharyngeal muscles serve to open the tubal orifice, and this is necessary for equilibrium of air pressure and health of pneumatic cells in

the mastoid. Muscular function is disturbed in cleft palate, and this disturbs the function which leads to hearing problems. Surgical closure of a cleft palate improves the condition of pneumatic cells. Of 29 children with cleft palate, 22 obtained normal hearing after surgery, and only 7 had a hearing loss above 20 but less than 30 dB. In a comparison study of 10 children who did not undergo surgery, 4 had normal hearing and 6 had a hearing loss above 20 dB with 3 of these having a loss above 30 dB. When tonsillectomy is required in patients with cleft palate, it is preferable to perform this surgery before closure of the palate. This prevents possible scar contracture in the tonsillar bed which may pull the palate and affect its function. This procedure is best performed under general anesthesia. (Warren/Oral Research Abstracts)

Sanvenero-Rosselli, G., Secondary correction of the palate. Symp Treatment Patients Clefts Lip, Alveolus and Palate, 2, 193–209, 1964.

The ultimate goal in cleft palate repair is to obtain normal speech. This is achieved when the velum is long and mobile enough to contact the posterior pharyngeal wall. It is extremely difficult to improve speech if surgery is unsuccessful. Push back procedures have been used to achieve palatal lengthening when surgery has resulted in a short, scarred, or poorly mobile palate. Secondary suturing of the 2 posterior pillars containing the pharyngopalatine muscles complements elongation of a previously operated palate without reopening the velum or further scarring it. When the posterior pillars are too distant or weak, a superior based posterior pharyngeal flap is indicated. Where there is failure of union in areas along the length of the cleft, secondary repair should be undertaken 3 or 4 months after the primary surgery. This can be accomplished by refreshening the wound by means of lateral incisions, separating the mucoperiosteal flaps, and then

splitting the posterior pillars and suturing them in 2 layers. Often, however, the pharyngeal flap is the best solution to these postoperative failures. In complete failure of union and loss of tissue, diligent use of the remaining tissue integrated with a pharyngeal flap of maximal size offers a possibility of repair. Lifting of the palatal flap is difficult, however, because of dense scar tissue. The remaining mucoperiosteal flap must be mobilized to avoid tension on the closure line, and this can be accomplished by: interlaminar osteotomy, extending the dissection medially and downward, or preventing backward retraction of the palatal flap by means of a suture transfixing the margin of the bone lamina. In conditions of severe tissue loss, only the soft palate is repaired, and the hard palate is closed with an obturator. Where there has been sloughing of tissue and repair is impossible without the addition of tissue from outside the mouth, tubed skin flaps from the neck or arm are indicated. The flap is generally attached to the upper lip as an intermediate measure or introduced into the oral cavity through an incision in the nasolabial fold. It is then fixed by a posterior pharyngeal flap. In well-selected instances, this procedure may provide improved palatal function (Warren/Oral Research Abstracts)

**Trauner, R.,** Modern surgical methods in uni- and bilateral labial clefts. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 30–34, 1964.

A survey of the methods in use today for cleft surgery and their various modifications. Various deviations from normal suturing in layers to correct for the lack of tissue in the middle part of the lower end of the lip are described with methods to achieve symmetry of the lip and nose in bilateral cleft lips. (Waite/Oral Research Abstracts)

Johnson, B., Secondary osteoplastic completion of maxilla and palate. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 128–132, 1966.

Ten years ago, bone grafting was introduced in the treatment of alveolar and palatal clefts. Since that time, autogenous bone grafting procedures have been used extensively in combination with dental orthopedics. Preoperative preparation, operative technic, and final treatment results of a number of patients are described. Bone grafting is definitely the proper treatment to maintain and stabilize orthopedic results and to achieve acceptable esthetic results. (Waite/Oral Research Abstracts)

Stellmach, R., Modern procedures in uniand bilateral clefts of lip, alveolus and hard palate with respect to primary osteoplasty. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 48–66, 1966.

A method of primary alveolar osteoplasty by means of a tilted vomer flap is presented with various methods of palatal osteoplasty. The advantages and disadvantages of various donor sites are discussed, stressing the need to wait for a longer series and late results before judging the orthodontic value of primary osteoplasty. Primary bone grafting has not prevented the bite development similar to that found in carefully treated patients without bone grafting. (Waite/Oral Research Abstracts)

Rehrmann, A., Operations of clefts of the hard and soft palate. Symp Treatment Patients Clefts Lip, Alveolus, and Palate, 2, 99–104, 1966.

Survey, review, and discussion, including primary veloplasty and surgical procedure for the closure of palatal clefts. (Waite/ Oral Research Abstracts)

# **ANNOUNCEMENTS**

The Cleft Palate Center at Montefiore Hospital and Medical Center, New York City, will present its annual Symposium on Friday, April 19th, 1968. The guest speakers at this symposium will include Dr. Elise Hahn, Director of Speech, California State College, Los Angeles, California, Dr. Donna O'Hare, Director, Bureau for Handicapped Children, New York City Department of Health, and Dr. Stanley Taub, Plastic Surgeon, New York Medical College.

The Fourth International Conference on Oral Biology will be held in Copenhagen on July 15 to 17, 1968. The Conference is sponsored by the International Association for Dental Research and supported by a grant from the Colgate Palmolive Company. The Conference has been arranged to discuss three main themes under the common heading of "The Biology of Interfaces". Information can be obtained from Mogens Skougaard, Dr. Odont., Royal Dental College, 4 Universitetsparken, Copenhagen, Denmark.

The Tord Skoog Society of Plastic Surgeons, a society of plastic surgeons all trained by Professor Tord Skoog in Upsala, Sweden, has been founded. The first meeting was held in Upsala on October 3–5, 1967. The following officers were elected: Santori-Bugiu (Italy), Schultz (U.S.A.), Körlof (Sweden), Eastwood (Great Britain), and Zisser (Austria).

## Time and Place, ACPA

1968—April 25, 26, and 27	. Miami Beach at the Deauville	
1969—International Congress, April 14, 15, 16, and 17		
	Houston at the Shamrock	
1970—April 16, 17, and 18	Portland at the Hilton	
1971—date unspecified	Pittsburgh	
1972—date unspecified	Salt Lake City	

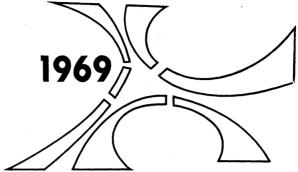
A postgraduate course in maxillofacial injuries will be given at The University of Iowa, Department of Otolaryngology and Maxillofacial Surgery, May 13–18, 1968. Limited to 14 otolaryngologists, preferably those engaged in academic practice, the course will deal with the immediate and delayed treatment of injuries to the soft tissues and underlying

skeletal structures of the face and with associated dental problems. In addition to lectures and demonstrations, ample laboratory practice will be given in methods of open and closed reduction, interdental fixation, suture techniques, and the utilization of skin flaps. The fee is \$250.00. Apply to: Leslie Bernstein, M.D., B.D.S., Associate Professor, Department of Otolaryngology and Maxillofacial Surgery, The University of Iowa, Iowa City, Iowa 52240.

Graduate Traineeships in Cleft Palate Therapy and Rehabilitation, supported by the United States Public Health Service, are available to qualified applicants. Clinical training is offered at the Lancaster Cleft Palate Clinic, Lancaster, Pennsylvania. Graduate work in a basic science in connection with the clinical training is encouraged. The annual stipend is \$6,000.00 with annual increments and dependency allowances, and is tax-free. Address all inquiries to: Chairman, Committee on Traineeships and Fellowships, University of Pennsylvania, School of Dental Medicine, 4001 Spruce Street, Philadelphia, Pennsylvania 19104.

A course in otorhinolaryngology and cervico-facial cancerology will be offered December 4 to 8, 1967, at the College of Medicine of the Hospitals of Paris, M. Aubrey, Professeur. For further information write Dr. H. Laccoureye, General Secretary, Department of Oto-rhinolaryngology, Hôpital Laënnec, 42, rue de Sèvres, 75—Paris 7e.





On November 24 I received the nicest letter. It read in part: "I should like to inform you that the National Advisory Dental Research Council at its meeting on November 13–15, 1967 recommended approval of your research grant application... in the approximate amount listed below". (The full amount requested was recommended.) However, all budgets these days are being negotiated and at press time we have not entered into the negotiations because our grant year does not start until September 1, 1968. We continue to be optimistic. Nevertheless, we are continuing to be as conservative as possible about making future commitments until we know precisely what our financial resources will be.

So, our proposal for a Congress has been reviewed by our peers. It has competed favorably during a period of unusually keen competition. One more indication that the Congress is timely and that the Association is providing professional leadership for dealing in depth with one of the relevant issues of the day. We have good reason to feel just a bit proud.

Initial contacts with individuals and institutions abroad have been most gratifying. We continue to expand the list of persons interested in coming to the United States to attend the Congress. A number of American institutions are in the process of inviting some of the foreign visitors to their clinics and training centers. Now is the time to extend the list. Contact Dr. McWilliams if you would like to welcome visitors to your center or if you wish to arrange for speakers from other lands. Our foreign guests must start to make their travel plans now. If you wait until fall to make your contacts, you may not get your first choice. Furthermore, your invitations now will help us to spur increased interest in the Congress among our nonAmerican friends. We like to think of the entire membership of the Association as serving on the Congress Public Relations Committee. Help us all by acting now.

Dr. Donald Warren and his committees have spent hundreds of hours working on the plans for the commercial and scientific exhibits for the

## Secretariat Page

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Congress. A prospectus for commercial exhibitors has been developed and consideration has been given to the development of a commercial exhibitor's directory. Success of the commercial exhibit venture will not add only another dimension to the Congress but also to its financial support. In fact, it has been our dream that some of the funds from this aspect of the Congress might be available to support future programs of the Association. Again we need your help right now. Please contact Don Warren if you have any suggestions for commercial exhibitors or if you have a contact that can be used by the Committee in soliciting an exhibitor.

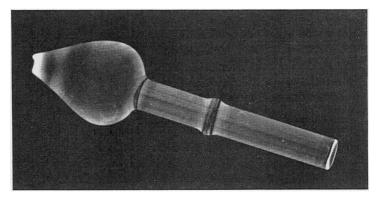
When we began planning for the Congress, 1969 seemed far off in the future. But time has slipped by and we now have little more than a year to go. In fact, all the plans that matter will have to be completed within six months! The entire Secretariat will be at our annual Association meeting in Miami. We will make a detailed report about the Congress at that time. We will be looking forward to seeing you then and to receiving your comments and suggestions.

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

# LETTERS TO THE EDITOR

## Dear Editor:

For several years we were unable to locate nasal olives for use with water manometers and pressure transducers. A year or so ago, Miss Marcia Lewin called to our attention olives produced by Geroge Berbert and Sons Co., 1717 Logan Street, Denver, Colorado 80203. These olives are available in different sizes. An olive labeled 530-A % inch is shown in the enclosed photograph (photo is actual size of olive). We have found this particular nasal olive fits the nares of both children and adults. We were able to purchase olives of this size in boxes of 12 nasal olives each, or cases of four boxes (48 nasal olives) for \$19.80 per case.



RALPH L. SHELTON, Ph.D.

Associate Professor

LINDA CHISUM, M.A.

Research Associate

University of Kansas Medical Center

Rainbow Boulevard at 39th Street

Kansas City, Kansas 66103

## Dear Editor:

The purpose of this letter is to acquaint readers with a technique; research reports about its use will be forthcoming.

Hypernasality persists in approximately 40% of those patients who have undergone primary cleft palate surgery. In spite of a variety of techniques for correction of this velopharyngeal incompetence, approximately 25% of the secondary surgical patients have persisting hypernasality. Post-surgical analysis of patients at the Stanford Medical Center has revealed that those patients who use accessory musculature, such as pos-

terior and lateral pharyngeal walls, are less hypernasal than those who do not. Based on this observation, two sets of therapeutic procedures have been initiated in an effort to better speech results.

The first procedure attempts to train the patient to valve off his oralnasal port by tetanizing the lateral and posterior pharyngeal walls with electrical muscle stimulation. We have found that the patients rapidly learn control of this sphinetering, which may very well be voluntary control of the gag reflex. Patients who are capable of voluntarily porting off their nasal cavity show a decreased nasal air loss on respiratory studies. Once the ability to reduce nasal air escape is acquired, efforts are bent toward incorporating this voluntary control into speech.

The method for effecting dehypernasal speech employs an operant conditioner. Two microphones are positioned to monitor the separate (oral and nasal) components of speech. The signals from each are independently amplified, full-bridge wave rectified, and then presented on a 100-microampere balance meter as an oral or nasal signal. With the independent use of volume control, positive feedback can be provided even to those patients who speak only with slight hypernasality, providing they talked less hypernasally than the volume setting anticipates.

Preliminary results from patients who have undergone the above training are encouraging. We pass this information on to readers of CPJ with the hope that they might join us in the exploration of similar procedures.

RICHARD B. YULES, M.D.
JOSEPH E. JOSEPHSON, D.M.D.
ROBERT A. CHASE, M.D.
Stanford Medical Center
Palo Alto, California 94304

## Dear Editor:

I felt very honoured at finding an abstract of my contribution to cleft palate history in your journal, July 1967, Volume 4, page 269. ("Some historical remarks on congenital short palate"; *Brit. J. plastic Surg.*, 19, 308–312, 1966.) Nevertheless, I want to express my disappointment in Dr. MacLennan's comment.

My study was based on the fact that Professor Roux was not the first author on the subject of congenital velopharyngeal insufficiency, as is almost unaminously declared in literature. Roux solely described, for the first time, a submucous cleft of the hard palate in a patient with a congenital cleft soft palate! And not in 1822, as Dr. MacLennan misquotes, but in 1825.

The first one to properly describe a case of velopharyngeal insufficiency in combination with an intact palate and a submucous cleft of the hard palate was Dr. Gustav Passavant, in 1862! And that was the goal of my paper. My paper had nothing to do with congenital clefts of the palate, but with short palates.

H. P. J. WINTERS
Plastic Surgeon
Utrecht University Hospital
Utrecht, Holland
The Netherlands

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

Changes of address and subscriptions to the Cleft Palate Journal should be addressed to the Treasurer: Dr. Howard Aduss, 808 S. Wood Street, Chicago, Illinois 60079.

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

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# AMERICAN CLEFT PALATE ASSOCIATION

## Information for Applying for Membership

The Association was organized in 1940 with the following objectives:

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

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

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

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

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

Send applications or requests for further information to:

DR. VERNER V. LINDGREN Chairman for Membership American Cleft Palate Association 808 Medical Arts Building Portland, Oregon 97205