BOOK REVIEWS

ENLOW, DONALD H., *The Human Face*. New York: Harper & Row, 1968. Pp. 332. $20.00.

This elegant monograph is a welcome addition to the literature. It provides a hitherto unavailable comprehensive basic text and reference book on postnatal growth and development of the facial skeleton. The presentation is avowedly anatomical in its orientation and therefore details of cellular metabolism, biochemistry, and endocrinology properly are excluded from the discussion. Source material is documented carefully in a bibliography useful to those wanting to pursue some detail in further reading.

The book is divided into two very nearly equal portions. The first is a general review of bone and cartilage growth with correlation of histology and gross morphology with function. The complexities of remodeling are presented in detail. In the second part, the growth of the face is described anatomically step-by-step, bone-by-bone. A concluding chapter by W. Stuart Hunter on the elementary principles of cephalometrics provides clinical correlation especially interesting to those whose experience has been in the fields of patient care rather than basic science.

This volume is scholarly, clearly written, comprehensively annotated, preceptively illustrated, and nicely printed. It is a handsome package for anyone with so much as a peripheral interest in the subject.

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HOROWITZ, SIDNEY L., and ERNEST H. HIXON, *The Nature of Orthodontic Diagnosis*. Saint Louis, Missouri: The C. V. Mosby Company, 1966. Pp. 393. $19.50.

The authors have assembled a team of ten distinguished authorities from various disciplines who contribute to the subject of orthodontic diagnosis. The book is divided into three major parts containing a total of 19 chapters, all of which are interrelated to the art and science of diagnosis.

The first part, biological foundations, deals with growth and development of the body, dentition, and skull. Consideration is given to calcification, tissue response to tooth movement, the neuromuscular system and the physiology of occlusion, mastication and deglutition. Constitutional and functional influences as well as genetic variability of the face are covered.

The second aspect of the book, interdisciplinary considerations, recognizes various important parameters related to orthondontics, such as speech, periodontics, adolescence, congenital clefts, and other facial deformities.

The third section, an approach to orthodontic problems, is devoted to cephalometrics, prediction of facial growth, norms, classifications, treatment goals, and an approach to diagnosis and implications for treatment.

The authors set out to unite the biological and clinical foundations of orthodontic diagnosis, and they have accomplished their goal admirably and in a logical, integrated manner. It is difficult to single out any one outstanding aspect of this book since it is all very informative and well done. The only minor criticism that might be made is that the subject matter in the first part of the chapter on cephalometrics may be slightly irrelevant.

The material has been well prepared, thoughtfully integrated and carefully chosen to give a good balance between the basic and clinical sciences, which are well blended by all contributors. The book is well illustrated and each chapter has an extensive bibliography for the investigator or clinician to utilize. The authors are to be commended for their contribution to the profession. This book belongs in the library of every student and orthodontist.

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LENCIONE, RUTH M. (ed.), *Cleft Palate Habilitation.* New York: Division of Special Education and Rehabilitation, Syracuse University Press, 1968. Pp. 176. $4.95.

This text contains the proceedings of a 1967 symposium on cleft palate habilitation, the fifth such symposium held at Syracuse University. The 1967 symposium was a public service program attended by representatives from the different disciplines and associated areas interested in the welfare of cleft palate children.

Eight authors participated. Ruth M. Lencione edited and gave an introductory overview. Harold Westlake discussed speech learning in cleft palate children, Joanne D. Subtelny gave detailed information about studies of palatopharyngeal valving. Mohammad Mazahari discussed the role of the prosthodontist in cleft palate habilitation. William M. Olin reviewed the orthodontic considerations in the treatment of cleft children. A critical evaluation of the primary pharyngeal flap was given by Richard B. Stark. The hearing problems in cleft palate children were analyzed by E. Harris Nobar. Aubrey L. Ruess discussed the physosocial factors in the cleft palate patients.

The symposium emphasized the team approach and the gradual shift from the independent or multidisciplinary to the interdisciplinary approach in handling cleft lip and palate children. Emphasis is upon the child as a growing, developing, and changing organism requiring a treatment plan that is dynamic, in proper order, and timed from birth to adulthood.

This book contains a wealth of valuable information in the surgical, orthodontic, and prosthetic management of cleft lip and palate children and gives a deep insight into their speech, hearing, and psychological problems. It is highly recommended, not only for persons directly involved in the treatment of these children, but also for educators, social workers, clergymen, parents, and public school administrators.

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ABSTRACTS

Apar, Virginia, and Gene Stickle, Birth defects. *JAMA 204,* 371–374, 1968.

Abnormal conditions of congenital origin are a leading cause of death and disability in the United States. An estimated 500,000 fetal deaths and at least 62,000 deaths among the live-born are associated with birth defects each year. An estimated 15,000,000 persons have one or more congenital defects which affect their daily lives. Birth defects constitute a leading cause of hospitalization of children. (authors' summary: Gregg)

Atherton, J. D., Cleft palate in the dog. *Dent. Pract. (Bristol), 18,* 145–150, 1967.

When there is a cleft of the secondary palate in the newborn dog, the tongue may lie in the floor of the mouth or above the palatal shelf and in the nose. It is more common to find the tongue in the nose of dogs with a cleft of the secondary palate rather than in dogs with a primary and secondary palate cleft. If the tongue lies in the mouth, then the palatal shelf is horizontal in position, and if the tongue is in the nose, the shelf is positioned in a ventral (downward) direction. The cleft is wider when the tongue lies in the nose, but in all dogs studied there was a divergence of the pterygoid plate and hamuli. One shelf showed a severe reduction in its development, which was assumed to be because the upper surface of the tongue

impinged on the growing margin. Another shelf showed a change in direction of growth which was attributed to the tongue moving from the nose to the mouth on that side. These findings are of significance to those clinicians who use presurgical orthopedic appliances for the treatment of cleft palate babies. (Lennox/*Oral Research Abstracts*)

Barton, R. T., Hyperrhinolalia following adenotonsillectomy. *E. E. N. T. Digest, 30,* 68–73, 1968.

Temporary hyperrhinolalia is estimated to accompany T & A in 7.2% of operated cases; lasting velopharyngeal dysfunction in 1%. The author reviews briefly the anatomy of the pharynx, the physiology of speech formation, urges caution in instances of cleft palate, submucous cleft palate, congenital velopharyngeal incompetence, and dysfunction due to palsies of the pharyngeal plexus, and he outlines surgical measures which may be utilized to improve defective speech which results from adenotonsillar surgery. His report, based upon experiences with over 200 patients studied by the Cleft Palate Service which is associated with Saint John's Hospital, Santa Monica, Calif., is directed primarily as a warning to Otolaryngologists who are doing throat surgery. (Gregg)

Bethmann, W., and H. J. Hochstein, Anesthesiological experiences in 4,000 operations on infants and children for cleft lip and plate. *Plastic reconstr. Surg., 41,* 129–134, 1968.

The extensive experience of the Thallwitz Schlossklinik in Leipsig is reported and compared to other similar reports from many countries. The European techniques and the literature citations are of interest. (Cosman)

Braithwaite, F., and D. G. Maurice, The importance of the levator palati muscle in cleft palate closure. *Brit plastic Surg, 21,* 60–62, 1968.

The authors describe direct dissection and suturing of the levator palati muscles to produce maximum mobility following cleft palate closure. When its fan-like insertion is detached from the posterior of the margin hard palate and dissection from surrounding tissue, it contracts into firm narrow fasciculus of muscle readily sutured to its counterpart on the opposite side. In addition the superior pharyngeal constrictor is dissected from the lateral pterygoid plate to mobilize inward the lateral pharyngeal wall to further decrease nasopharyngeal space. (Babcock)

Gorlin, R. J., and H. Sedano, Ellis-Van Creveld syndrome. *Modern Medicine, 36,* 108–109, 1968.

The authors have described and provide vivid illustrations showing the cardinal features of this syndrome. It includes bilateral manual polydactilia, chondrodysplasia of long bones resulting in acromelic dwarfism, hidrotic ectodermal dysplasia affecting principally the nails and teeth. In half the affected persons there is also congenital cardiac malformation. It is inherited as an autosomal recessive trait. Other skeletal anomalies include genu valgum, talipes equinovarus, talipes calcaneovalgus, pigeon breast, and curvature of the humerus. There may also be abnormalities of the toe and fingernails, clyptorchidism, epispadias, and hypospadias. One third of the afflicted individuals are mentally retarded. Oral manifestations are quite characteristic and common, including fusion of the anterior portion of the upper lip to the maxillary gingival margin so that no mucobuccal fold exists anteriorly, notching in the middle of the upper lip, replacement of the two upper central incisors, either the primary or secondary dentition, by an abnormally shaped tooth. Other teeth tend to be conical shaped and may have hypoplastic enamel. The anterior portion of the lower alveolar ridge

is often serated. In more than 50% of the cases reported, teeth were present at birth. (Gregg)

Gosepath, J., and J. Haym, Findings on the ear of individuals with cleft palate. *Z. Laryng. Rhin. Otol., 47,* 360–365, 1968.

In a series of 116 cases of clefts of the soft and hard palate treated at the University of Mainz from 1954 to 1967, 69 cases (60%) showed concomitant ear ailments. Of these, audiometric hearing defects were present in both ears in 26 cases and in one ear in eight. Acute and chronic otitis were detected mainly in one ear only, but tympanic residues were seen both unilaterally and bilaterally. Drum retractions and adhesions were also found. Tests comparing pneumatisation of the mastoids in cases with cleft palate, those with chronic otitis, and normal controls showed no difference between chronic otitis patients and subjects with both cleft palates and ear lesions. Only a slight difference was found between chronic otitis subjects and cleft palate cases without ear anomalies. It is suggested that genotype and paratype are causally related to the failure of pneumatisation. The etiology of middle ear anomalies in relation to cleft palates is disscussed. (21 references.) (*Birth Defects: Abstracts of Selected Articles,* The National Foundation-March of Dimes, *5*(9), abstract number 68-740.)

Hashimoto, Yoshijuki, Yasunobu Eguchi, and Yoshio Morikawa, Movement and fusion of the fetal palatine shelves in normal and cortisone-treated gravid mice. *Acta Anat. Nippon, 42,* 73–81, 1967.

Three hundred and forty-one embryos (I) from 64 normal pregnant mice and 224 embryos (II) from 46 cortisone-treated pregnant rats were killed at various times from the 13th–19th days of gestation. The serial frontal sections of the heads were histologically studied to determine the early process of fusion of the palatine shelves. The palatine shelves began a unilateral upward movement to the horizontal plane on the 14th day of gestation in 8 of I and 44 of II. Partial fusion of the shelves began on the fetal 14th day in 59 of I. Partial fusion began on the fetal 15th day in 10 of II. Complete fusion was found in 152 of I and in 10 of II. In the majority of instances, upward movement of one of the palatine shelves probably took place from the anterior part backward, and upward movement of the other shelf probably occurred from the posterior part forward. Bilateral upward movement of the palatine shelves was found only in 2 of I and probably occurred from the anterior part backward. Fusion of the palatine shelves began at the site somewhat anterior to the middle point of the palatal median line and progressed from the site forward and backward. (Akiyoshi/*Oral Research Abstracts*)

Hayward, H. L., Neuromuscular disorders affecting the dento-facial structure. *New York J. Dent., 37,* 1–7, 1967.

The human face, more than any other part of the human body, identifies a person and establishes his place in the community. It imparts depth and meaning to the spoken word. Craniofacial deformities include: (1) congenital conditions (cleft palate, and/or lip micrognathia, and mandibular prognathism), (2) trauma or arrest of condylar development, and (3) deformities resulting from surgical excision or malignancy. However prejudicial and ignorant it might be, there seems to be a notion of close correlation between physical handicaps and mental retardation. Children afflicted with cerebral palsy were studied at a hospital facility. These children were found to suffer from malocclusion twice as frequently as children in a normal control group. Muscular control was not at its best, with the result that muscle forces acting on the dentition contributed

greatly to open bites, speech impairment and gingival conditions. In some 15–20% of the cases, premedication was helpful in establishing a rapport between patient and Orthodontist. Great contributions are made in rehabilitating handicapped persons by dentofacial reconstruction. This is accomplished in cosmetics and function. It enhances the patient's chance to lead a satisfying life and it helps the family and parents to improve the environmental structure within which the patient must live and find recognition and acceptance. (Goldenberg)

Honjow, I., N. Isshiki, and M. Morimoto, Aerodynamic pattern of cleft palate speech. *Plastic reconstr. Surg., 42,* 465–471, 1968.

Oral breath pressure, nasal flow rate, and oronasal flow rates were measured in 24 cooperative patients before and after pharyngeal flap operation. The authors discuss the difficulties inherent to these measurements and the instrumentation involved. The significance of these test results in predicting the prognosis of pharyngeal flap operations appears to lie in that they help to demonstrate whether or not faulty habits of articulation coexist with the velopharyngeal insufficiency. The details of these correlations are to be presented later. (Cosman)

Hoopes, J. E., and J. I. Fabrikant, Objective evaluation of cleft palate speech. *Plastic reconstr. Surg., 42,* 214–224, 1968.

This review article lists and briefly discusses the many measures for cleft palate speech evaluation that have been developed. Some of the clinical experiences of the authors in the use of cineradiography with acoustic analysis of speech is also presented. (Cosman)

Hrivnakova, J., M. Fara, and V. Chlupackova, Complications of healing after primary repair of cleft lip and palate. *Acta chir. Plasticae, 10,* 115–129, 1968.

A detailed review is presented of the complications following cleft lip and palate repair in a series of 1,000 operations. Complications after operation are divided into two categories, surgical and pediatric. By comparing various data, possible mutual relationships and probable causes are elicited. Eliminating cosmetic and functional shortcomings, emphasis is on complications due to imperfect healing, the incidence following operation for cleft lip being 0.83 percent and for cleft palate 17.4 percent. There could not be elicited a connection in the incidence of complications with the severity of the cleft nor various suture materials used, though the type of bacterial flora in the nasopharynx with operation during the winter months was related. (Babcock)

Hynes, W., Observations on pharyngoplasty. *Brit. J. plast. Surg., 20,* 244–256, 1967.

Pharyngoplasty is indicated if the patient's speech continues to show cleft palate stigmata after primary closure. In such patients, laryngeal air bypasses the palatal pharyngeal region via the lateral pharyngeal recesses. Lateral pharyngeal flaps are transposed into a defect across the posterior pharyngeal wall made by a transverse mucosal incision slightly below the level of the eustachian region. This produces a considerable muscle ridge which moves with the palate. All diameters of the palate are reduced considerably. If there is a residual cleft in the palate, it may be repaired 2–3 months later. Definitive assessment is made 9–12 months after operation. Twenty percent of the patients require further operation. (MacGregor/ *Oral Research Abstracts*)

Isshiki, N., and M. Morimoto, Anterior cleft palate closure by turnover flaps. *Plastic reconstr. Surg., 42,* 249–251, 1968.

The anterior part of the hard palate cleft is sometimes difficult to close, especially when a pushback procedure is also being performed. The authors have employed small mucoperiosteal flaps hinged on the cleft edges and elevated on both sides of the anterior hard palate cleft. The flap on the septal side, after paring off of the mucosa, is turned over the raw surface of the other flap so that they overlap one another. Through and through sutures are used for fixation. No fistulae have occurred in 11 patients with complete unilateral clefts so treated. (Cosman)

Kiehn, C. L., J. D. Des Prez, and F. Brown, Maxillary osteotomy for late correction of occlusion and appearance in cleft lip and palate patients. *Plastic reconstr. Surg., 42,* 203–207, 1968.

9 cleft palate patients and 4 post trauma cases have been treated by maxillary osteotomy to produce a LeForte I type of fracture. Lateral cleft segments can be spread at the alveolar gap; reopening of the hard palate has not been done in cleft patients. Fixation has been mostly by direct suspension wiring. Simultaneous bone grafting has been needed in only 1 of the 9 cleft patients and in 2 of the 4 traumatic cases. Complications have included the loss of 3 teeth in the cleft segments of 2 patients. Non-union was not a problem in the cleft patients but did occur in 1 post traumatic case. (Cosman)

Kittel, G., K. Saller, and H. Bussman, Problems in the causation of cleft lip and palates. *Folia Phoniat (Basel), 19,* 264–280, 1967.

Since 1958, it has been mandatory in Bavaria to report instances of cleft palates in children born outside of hospitals. From 1959–1964, 1,135 instances were reported. Sixty and four-tenths percent occurred in males and 39.6% in females. The incidence of cleft palate was at least 3/1,000, of which only 8.7% could be shown to have hereditary origins. This suggests possible exogenous damage as an etiologic factor; however, none has yet been identified. Phenomena such as different degrees of severity within a family, preference for the left side of the face, and occurrence in twins and their relation to this malformation are discussed. (32 references.) (Stahl/ *Oral Research Abstracts*)

Lewis, S. R., J. B. Lynch, and T. G. Blocker, Jr., Fascial slings for tongue stabilization in the Pierre-Robin syndrome. *Plastic reconstr. Surg., 42,* 237–241, 1968.

While conservative nonsurgical treatment of most cases of Pierre-Robin syndrome is preferred by the authors, intervention is needed in some cases. Passage of an autogenous fascia lata sling from the anterior inferior surface of the mandible back through the junction of the middle and posterior ⅓ of the tongue then forward again with both ends sutured to the periosteum of the mandible has been generally successful in achieving tongue stabilization in this group of patients. This procedure has eliminated the need for a secondary release or revision as is sometimes the case in the Beverly Douglas tongue-lip adhesion procedure. (Cosman)

McDermott, A., J. Insley, M. E. Barton, P. Rowe, J. H. Edwards, and A. H. Cameron, Arrhinencephaly associated with a deficiency involving chromosome 18. *J. med. Genet., 5,* 60–67, 1968.

Bilateral cleft lip, cleft palate, and some form of arrhinencephalic malformation of the brain are among the more common features of trisomy 13–15. The authors report a case of a male infant with arrhinencephaly, severe bilateral cleft lip and palate, and a deficiency of the short arm of chromosome 18. The parents appeared to be normal, but the mother had an identical karyotype. Two possible inter-

pretations are given by which the observed abnormalities could have resulted in arrhinencephaly in the infant without affecting the mother. (Noll)

Mellman, W. J., The genetic basis for the variability of hereditable diseases. *J. Pediat., 72,* 727–736, 1968.

The variety of altered expressions of the gene or genes responsible for a particular chemical, metabolic, and/or physical characteristic is termed genetic heterogeneity. Genetic variability is based on biochemical evidence in several hereditary diseases, but in other disorders, such as oral-facial-digital syndromes, genetic distinctiveness may be based on subtle differences in clinical manifestation or expression between kindreds as well as the transmission pattern of the disorder within a given family. Based on the pedigrees of affected individuals there is evidence for two genetic subtypes of the oral-facial-digital syndrome: one is consistent with a dominant pattern of inheritance and the other with an autosomal recessive one. This illustrates that mutations of single genes may cause disorders with multiple dysmorphic manifestations. It is suggestive that single gene loci are responsible for the two subtypes of the syndrome. (Noll)

Morawa, A. P., and S. S. Han, Studies on hypoxia: I. Gross and histologic influences of maternal anoxia upon the developing rat foetus. *Arch. oral Biol., 13,* 745–754, 1968.

As the first communication of a series to be reported, this article represents the result of a survey work which was designed to serve as the basis for further experimentation on the subject. Effects of maternal anoxia upon the developing rat foetus were studied by subjecting pregnant Sprague-Dawley rats to an atmosphere of 100 per cent nitrogen for a total of 18 min on the 10th, 14th, 17th, or 20th day of gestation and their offspring were then evaluated morphologically, radiographically, and histologically. All defects of skeletal morphology were found in newborns that were treated on the 10th day of gestation. The animals treated on the 20th day of gestation exhibited a consistent retardation in eruption of the molars. Histologically, a serious lag in the differentiation of epidermal and connective tissue cells was observed in animals subjected to anoxia on the 10th day, while an engorgement of the blood vessels was apparent in animals which were subjected to anoxia on the 20th day. These changes are discussed in relation to possible biochemical and physiologic effects of anoxia on these cells. (authors' summary: Troutman)

Powell, W. P., and H. P. Jenkins, Transverse facial clefts: Report of three cases. *Plastic reconstr. Surg., 42,* 454–459, 1968.

Three new cases of lateral facial clefts are presented. The embryologic background is discussed and associated anomalies, syndromes and treatment reviewed. (Cosman)

Quigley, L. F., Pressure and cephalometric technics for evaluation of normal and cleft palate patients: II. Palatopharyngeal competency. *J. dent. Res., 47,* 760–768, 1968.

The results from air pressure technics and cephalometric measurements are compared with respect to palatopharyngeal competence. The lateral cephalometric radiogram measures palatopharyngeal competence best in a static condition. The value of pressure data as a measure of palatopharyngeal competency is doubtful. (Luban)

Robertson, N. R. E., and A. Jolleys, Effects of early bone grafting in complete clefts of lip and palate. *Plastic reconstr. Surg., 42,* 414–421, 1968.

This careful study documents adverse effects of early bone grafting. 56 patients

were studied and bone grafts were performed in 14 cases. Treated and untreated cases were paired. All received a course of inpatient presurgical orthopedic management until the infant was 3 months of age. Closure of lip, anterior and soft palate, was then performed. A retention splint was inserted after healing. At 11 months of age the hard palate was repaired and retention splint again used. At 15 months, via a buccal approach, a rib graft to the alveolar area was carried out in the grafted group and in both grafted and ungrafted patients a retention device was worn for another 6 months. The bone graft was the only difference between the two groups. Careful cephalometric X ray, dental occlusive models, and photographic follow-up showed clear deterioration in the dental base relationship in the bone grafted patients, and demonstrated the development of pseudoprognathism. The anteroposterior occlusion was poorer in the grafted group and there was also a tendency to poorer occlusion in the buccal segments as well. The authors felt it imperative to abandon bone grafting since its results seemed to them clearly deleterious. (Cosman)

Ross, L. M., and B. E. Walkter, Movement of palatine shelves in untreated and teratogen-treated mouse embryos. *Amer. J. Anat., 121,* 509–522, 1967.

The palatal shelf movement after tongue displacement in living A/J strain mouse embryos was evaluated. In the embryos that were exposed to air 14 days 22 hours post conception, usually one or both palatine shelves were in a vertical position and when the tongue was pulled from between the shelves, they moved to a horizontal position and met in the midline. The same maneuver was accomplished on embryos submerged in saline or in mouse blood plasma. This produced an effect which differed from those that were exposed to air in that there was greater turgor of the shelves and persistence of a gap between the shelves after they had progressed toward the horizontal plane. These same differences were reproduced by transferring the same embryo from air to fluid and vice versa. The horizontal shelf-movement following tongue displacement was usually confined to the anterior half of the shelves, and when the tongue was completely removed and the embryos studied it was concluded that the tongue contributes to the flattening of the palatal shelves in a horizontal plane. When the same studies were done on embryos which were treated with doses of cortisone, vitamin A, or 300r of x-radiation, the effect was to retard the shelf movement. The retardation was the greatest with the x-radiation and least with the hypervitaminosis A. The teratogens also produced alterations in relative skull development. The cortisone and vitamin A treated embryos were at a slightly later developmental stage and the irradiated embryos were retarded in their development. (Troutman)

Schonenberg, Hans, and Richard Lautermann, The Pierre-Robin syndrome. *Z. Kinderheilk, 97,* 326–346, 1966.

The symptomatology of the Pierre-Robin syndrome is microgenia, glossoptosis, and respiratory anomalies very often combined with cardiac and mental disorders, anomalies of extremities, dysplasia of concha auriculae, and intestinal malformations. Pathogenetically, it is a developmental anomaly of the 1st visceral arch. Very often the syndrome seems to be part of a greater more complex syndrome of anomalies, so that the morbidity may be higher than is generally believed. A brief review of 23 case reports from a period of 8 yr shows the relative high rate. Wire-extension of the microgenia, which has been used with success in 5 patients, is recommended as therapy. (Jacobsen/*Oral Research Abstracts*)

Schwartz, D. M., and A. P. Chaudhry, Planimetric studies of mandibles in A/Jay mice born with cortisone-in-

duced cleft palates. *J. dent. Res., 47,* 725–731, 1968.

The purpose of this study was to determine the effects of cortisone on the growth of the mandible in neonatal mice with induced cleft palate. The evidence indicated that mouse fetuses with cortisone-induced cleft palates had significantly shorter mandibles. (Luban)

Sementchenko, G. I., Osteoplasty in the treatment of cleft palate. *Stomatologiia (Moskva), 46,* 55–58, 1967.

Radical uranoplasty is the most frequently employed technic in the treatment of cleft palate, but there is still discussion as to the most favorable age for surgical intervention. Some object to its performance in early childhood claiming that it then causes deformation, mostly narrowing, of the maxilla. However, clinical observation has shown that deformation of the maxilla occurs both in operated and nonoperated patients. It is, therefore, recommended to operate on children not later than at the age of 4–5 yr, thus avoiding diseases of the respiratory tract and neuropsychological disturbances. Since 1964, in the Odessa Stomatological Clinic, radical uranoplasty combined with a single-stage osteoplasty of the defect of the palatine processes have been performed. A bone graft from the 6th or 7th rib, either complete or split, was inserted in the bone defect of the palate. Favorable results were obtained and 1.5 yr after the operation, no narrowing of the maxilla could be observed. In instances of radical uranoplasty without osteoplasty the deformation of the maxilla is caused by the fact that the mucoperiosteal flap covering the defect cannot replace bone tissue. (Ron/*Oral Research Abstracts*)

Sinha, R. N., Etiology of cleft lip and palate. *Indian J. plastic Surg., 1,* 22–25, 1968.

The author feels that the incidence of this deformity has increased in the last decade. In the series of 640 consecutive cases, genetic history was positive in 15%. Among environmental factors, Warkany and others have labelled vitamin deficiency in the mother as a major cause of this defect. Older mothers are more prone to give birth to children with this defect than younger mothers. Intrauterine infection with the protozoan toxoplasma as well as virus infection in early pregnancy are suspected to be teratogenic; similarly diabetic mothers have a higher incidence of deformed children. Thalidomide, aninopterin cortisone, antihistamines like mulizine, and high doses of Vitamin A as well as radiation are all suspect. The author suggests forming the National Cleft Lip and Palate Registry with the idea of detailed investigation into the etiology of this defect. (Maneksha)

Soukup, S., E. Takacs, and J. Warkany, Chromosome changes in embryos treated with various teratogens. *J. embryol. exp. Morph., 18,* 215–226, 1967.

The chemical teratogens, nitrogen mustard, chlorambucil, streptonigrin, hydroxyurea, and thalidomide, were administered to rats and rabbits on the 8th to 12th day of pregnancy. In addition, a riboflavin deficient diet was given to rats from first to 13th day of pregnancy. Embryonic external malformations were correlated with chromosome abnormality. The external malformations included short mandible. The chromosome abnormalities, chromatid breaks and exchanges, exhibited a peak incidence 15 hours after administration of the teratogen. The percent of external malformation versus the percent chromosome abnormalities for each group was as follows: nitrogen mustard, 90%–17.8%; chlorambucil, 79%–11.1%; streptonigrin, 75%–7.3%; hydroxyurea, 92%–0%; thalidomide, 50%–0%; and riboflavin deficient diet, 75%–0%. The authors conclude that the temporary chromosome breaks and exchanges occurring in the first division after teratogenic treatment indicates general

cell damage and probably not the effect of the teratogen on the chromosome. (Weeks)

Surina, O. T., Cytogenetic study of patients with cleft lip and palate. *Acta chir. Plasticae, 10,* 177–180, 1968.

An investigation was performed of the relationship between patients with cleft lip and palate and anomalies of chromosomes. Cytogenetic analysis of the peripheral blood of 18 patients revealed a normal karyotype without numerical or morphological aberrations. (Babcock)

Wallner, L. J., B. J. Hill, W. Waldrop, and C. Monroe, Voice changes following adenotonsillectomy: A study of velar function by cinefluorography and video tape. *Laryngoscope, 78,* 1410–1418, 1968.

Cinefluorography with simultaneous video tape recording was used and proved valuable in the interpretation of velar function. Its use can help determine which patients may develop serious voice defects after surgery upon the throat, or assist in therapy when this occurs, but it is not a practical method for routine pre-operative use. Alteration in the voice occurs commonly after T&A and was observed by the authors in 26 of 29 patients studied. These alterations were transitory and self limited, the speech returning to normal soon in the usual instance. Occasionally severe abnormalities of the voice appear following T&A, the chief causes being scarring of the tonsillar pillars, short palate, roomy nasopharynx, or some combination of these. Caution should be used in deciding upon adenoidectomy in children with repaired cleft palates, submucous cleft palates and bifid uvulas. If speech therapy does not restore voice function in postoperative T&A cases, surgery may be considered. This would include Teflon injection or pharyngeal flap construction. (Gregg)

ANNOUNCEMENTS

A new journal, *Revista Española de Cirugía Plástica,* the official publication of the Spanish Society of Plastic and Reconstructive Surgery, was published in May, 1968. Drs. U. Hinderer Meise and J. Quetglas Moll are the editors; they have the assistance of sixteen surgeons on their Editorial Board. The *Journal* will be published three times a year. This new *Journal* will publish articles on any subject in or related to the field of plastic and reconstructive surgery. This, of course, includes cleft lip and palate, and the first issue contained an article on midline clefts of the upper lip. Manuscripts are welcomed from interested writers in all countries. The *Journal* is published in Spanish, but there is an adequate summary of each manuscript in both English and Spanish. This *Journal* appears to be a suitable publication for those interested in this specialty and particularly those fluent in Spanish.

Applications for presentation of clinical lectures, table clinics, scientific and education exhibits, and motion picture, during the 110th annual session of the American Dental Association, which will be held in conjunction with the 57th annual session of Federation Dentaire Internationale in New York, October 12–16, 1969, can be obtained on request from the office of the Council on Scientific Session, American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611. Please specify area or areas in which participation is desired. Applications must be received by the Council before March to be considered. Applications received after March 1 cannot be accepted.

The University of Southern California School of Education announces the publication of the 6th annual Distinguished Lecture Series in Special Education and Rehabilitation. Among the lecturers are Lee Edward Travis, Beatrice Wright, and Laurence J. Peter. Copies of the publication can be obtained for $3.00 each, ordered from The University of Southern California Bookstore, Mail Order Department, University Park, Los Angeles, California 90007.

Newly elected officers of the American Academy of Maxillofacial Prosthesis are: President, Herbert H. Metz, D.D.S.; President-elect, Morton S. Rosen, D.D.S.; Vice-president, John E. Robinson, Jr., D.D.S.; Executive Secretary, William R. Laney, D.M.D.; Treasurer, Augustus J.

Valauri, D.D.S; and Editor, I. Kenneth Adisman, D.D.S. The 1969 annual meeting of the Academy will be in New York City, October 8 and 9.

A new society, The American Society for Preventive Dentistry, has been organized. Briefly, the purposes of ASPD are to inform and educate the general public about the benefits of preventive dentistry. Several functions are anticipated, among them a journal. Additional information can be obtained from the headquarters of the Society at 5929 North Milwaukee Avenue, Chicago, Illinois 60646.

A postgraduate course in maxillofacial injuries will be given at the University of Iowa, May 5–9, 1969. Limited to 14 otolaryngologists, preferrably 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. Apply to: Leslie Bernstein, M.D., D.D.S., Associate Professor, Department of Otolaryngology and Maxillofacial Surgery, University of Iowa, Iowa City, Iowa 52240, U.S.A.

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.

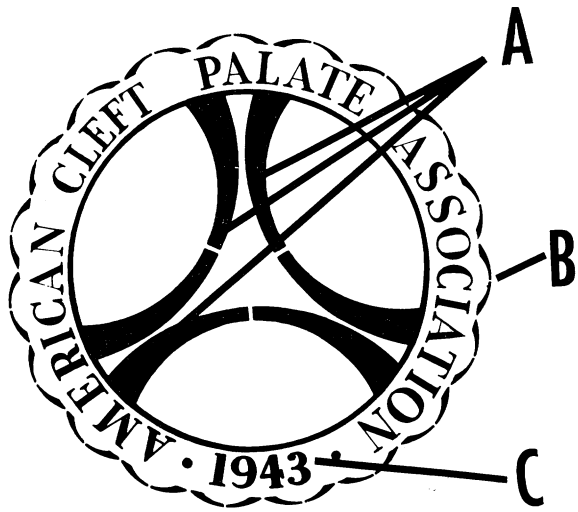
The Plastic Surgery Section of the Association of Surgeons of India has instituted a memorial lecture for the late Sir Harold Gilles, to be delivered each year at the annual conference of the Plastic Surgery Section. The lectureship is to be supported by the Gilles' Memorial Fund, established by the Plastic Surgery Section. Contributions to the Fund are solicited; inquires should be made to Dr. N. H. Antia, 'Ben Nevis' B. Desai Road, Bombay 26, India.

President Musgrave announces the adoption of an insignia for the Association, as follows.

Presented below is the official emblem of the American Cleft Palate Association. This insignia is the end product of much work and study on the part of Dr. Stephen Forrest and his Honors and Awards Committee in 1966 and 1967. A preliminary version of the insignia included the name of the American Academy of Cleft Palate Prosthesis, formed in 1943, and a forerunner of ACPA. The earlier insignia also indicated that the name of the organization was changed to the American Association for Cleft Palate Rehabilitation, a change that occurred in 1951. The American Cleft Palate Association assumed its current name in 1958.

The following key explains the emblem: A, the central space of the emblem is occupied by cross sections of cleft palate, representing dentistry, speech, and medicine; B, the border is made of many cross sections of cleft palates, representing many various disciplines; C, 1943, the year of organization.

The insignia will appear as part of ACPA letterhead, and in all publications of the Association.



The Cleft Palate Center at Montefiore Hospital and Medical Center, New York City, will hold its Annual Symposium on Friday, April 11th, 1968, 10:00 A.M.–4:00 P.M. Those interested in attending the Symposium please write or call: Cleft Palate Center, Montefiore Hospital, 111 E. 210th Street, Bronx, New York, 10467; telephone: 212-920-4781.

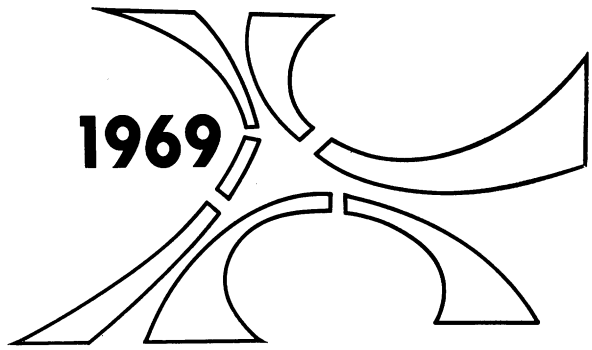
NOTICE: The page charge policy, instituted with the January 1969

CPJ, will not be assessed for the publication of Congress papers since the publication of Congress papers has been underwritten by the NIDR grant. If, however, the Congress paper is lengthened for publication, there may be page charges for the added pages.

TIME AND PLACE, ACPA

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

About the 1969 International Congress on Cleft Palate



These comments are being written before the Congress but you will be reading them after the Congress. You will now have made your judgments about the value of the effort. I can only hope that you have not been disappointed. I also hope that all of us have had our parochial veiws challenged and have been stimulated to take a broader view of the problem of cleft palate, coupled with a renewed resolve to review our assumptions and to revise our conclusions in the light of the new knowledge we have gained. May the members of the Association join with others around the world interested in the problem to keep the dialogue going that was started at the Congress. Who knows? Joining forces to deal with problems such as cleft palate may serve not only those afflicted but may also serve to demonstrate ever more clearly how men should work together for the common welfare of all.

The organization of complicated meetings is never the work of one person. Rather it is the result of the dedicated efforts of many, too many to be singled out one by one. I know that you would want me to express gratitude on your behalf for their efforts. And I should like to extend my personal thanks, most especially to the members of the Secretariat and to Ross Musgrave, the Immediate Past President of the Association.

Finally, may I say how deeply honored I have been to serve as Secretary-General of the Congress.

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

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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 60612.*

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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1968–1969

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