

ABSTRACTS

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Atherton, J. D., The natural history of the bilateral cleft. *The Angle Orthodontist*, 44, 269-277, 1974.

The morphology, growth and comparative anatomy of the bilateral cleft are discussed. A comparison of measurements between bilateral cleft and secondary cleft babies indicated that the nose and nasal septum are not overdeveloped in the bilateral clefts. The premaxilla is prominent in these cases because it lies in an abnormally forward position on the nasal septum. The deformities involving the premaxilla and probium arise early in fetal life, and there is no tendency for them to become more severe after birth. Bilateral cleft animals unlike man have no protrusion of the premaxillary region. It is hypothe-

sized that in man the cleft acts as a suture between the maxilla and premaxilla and allows the premaxilla and the probium to be carried forward with growth. Because of the absence of restriction on growth, there is no columella and the anterior nasal spine is diminutive. In the clinical management of these cases, no drastic action should be taken which might interfere with the favorable growth trend. The lip is closed at approximately four months, after the premaxillary position is improved by a technique such as utilized by Burstone. The palate is closed at approximately twelve months of age. At the age of three or four, the columella is restored by means of the Millard fork flap technique. In cases where the premaxilla cannot be retracted by pre-

surgical orthopedics, a premaxilla slide-back operation is suggested. (Luban)

Bonner, J. J., Method for evaluating intrauterine versus genetic influences on craniofacial anomalies. *J. Den. Res.*, 53, 1313-1316, 1974.

A method is proposed to distinguish between intrauterine and genetic influences in the etiology of teratogen induced craniofacial anomalies. Mouse strains that are either highly resistant or highly susceptible to cortisone induced cleft lip and palate are transplanted in the blastocyst stage to foster mothers that are either resistant or susceptible to cleft lip and palate. (Luban)

Boyne, P. J., Use of marrow cancellous bone grafts in maxillary alveolar and palatal clefts. *J. Dent. Res.*, 53, 821-824, 1974.

Particulate cancellous bone and marrow grafts were used in simulated alveolar and palatal clefts in Rhesus monkeys. Complete osseous regeneration of the cleft areas took place as the bone grafts underwent a remodeling process to form an apparently normal trabecular pattern. Developing tooth buds on either side of the grafted areas were not disturbed. (Luban)

Calabrese, C. T., R. B. Winslow, and R. A. Latham, Altering the dimensions of the canine face by the induction of new bone formation. *Plastic reconstr. Surg.*, 54, 467-470, 1974.

Experimental work is presented in which forceful widening of an osteotomy site is achieved with the defect filling with additional normal appearing bone. (Cosman)

Chandra, Ramesh, R. N. Sharma, and S. K. Makrandi, Permanent records of cleft lip, nose and palate abnormalities. *Brit. J. Plast. Surg.*, 27, 139-141, 1974.

The authors describe a technique for constructing full-sized three-dimensional models of cleft lip, nose and palate abnormalities in an effort to provide permanent records which would simplify documentation. (N. J. Lass)

Chandra, R., V. N. S., Yadava, and R. N. Sharma, Persistent buccopharyngeal membrane: Case Report. *Plast. reconstr. Surg.*, 54, 678-679, 1974.

A rare case of a child with a persistent buccopharyngeal membrane is described and the origin of the anomaly discussed. (Cosman)

Converse, J. M., D. Wood-Smith, J. G. McCarthy, P. J. Coccato, and M. H. Becker, Bilateral facial microsomia: Diagnosis, classification, treatment. *Plast. reconstr. Surg.*, 54, 413-423, 1974.

Fifteen patients with varying forms of the defect named by the authors bilateral facial microsomia are presented. In essence, these are patients with bilateral first and second branchial arch syndromes or various aspects thereof. One can accept the classification presented in most instances but it seems that that group whose presenting defects involve macrostomia, transverse facial clefts, and absent parotid ducts with relatively normal auricles both appears and possibly is a different entity. Details of surgical reconstruction of the mandible are presented. (Cosman)

Dostal, M., and R. Jelinek, Morphogenesis of cleft palate induced by exogenous factors. VI. The question of delayed palatal-process horizontalization. *Teratology*, 10, 47-54, 1974.

The course of secondary-palate closure was studied in control, cortisone-, and 6-azauridine-treated randombred H-Velaz mice. The size of the gap between the developing palatal processes and wet fetal weight were used as measures of secondary-palate development and overall fetal development. It was found that 250 mg of 6-azauridine injected im on day 14 both retarded the rate of fetal development and delayed initiation of horizontalization of palatal processes with regard to developmental age of fetuses; and that 7.5 mg of cortisone acetate injected im on day 12 affected the progress of horizontalization rather than its initiation. The mean distance between the medial edges of the palatine processes was significantly higher in cortisone-treated fetuses than in controls just before horizontalization. According to this finding the supposed discrepancy between the width of the head and the palatal processes (resulting in absolute or relative narrowness of palatal processes when they become horizontal) is present, at least in part, even before horizontalization. (Authors' Summary: Lass)

Flowers, R. S., Nasal augmentation by the intraoral route. *Plast. reconstr. Surg.*, 54, 570-578, 1974.

Nasal bridge augmentation via incision in the labial fornix employing a prosthesis synthesized from 3 consistencies of silicone rubber is reported. The ease of access and the simplicity of adjustment of the columellar strut height together with the minimal risk of exposure at the incision site and the absence of visible scars recommend this approach. Clearly, it may have some merit in certain cases of reconstruction following congenital nasal and maxillary conditions. (Cosman)

Gale, T. F. and V. H. Ferm, Skeletal malformations resulting from cadmium treatment in the hamster. *Biol. Neonate.*, 23, 149-160, 1973.

Cd induces a variety of grossly detectable malformations in the golden hamster including exencephaly, cleft lip and palate, amelia, micromelia and ectrodactyly. The frequency and types of underlying skeletal malformations induced by the i.v. administration of Cd at four times during the critical stages in hamster embryo organogenesis are presented. In general, all areas of the skeletal system are damaged by this heavy metal. This is manifested by the absence or poor development of ossification centers in different bones. Possible mechanisms of action of Cd are discussed. (This abstract is from *BioResearch Today—Birth Defects*, 3, October 1974, abstract number 13026.)

Greer, D. M., Jr., C. E. Moore, and Pat, Coleman, Orthoplast headcap for external fixation of facial fractures. *Plast. reconstr. Surg.*, 54, 614-615, 1974.

Fabrication of a lightweight Orthoplast cap is described for use in the treatment of unstable midface fractures. The ease and economy of construction recommend this modality in those occasional cases requiring such external fixation. (Cosman)

Hamburgh, M., L. A. Mendoza, M., Rader, A. Lang, H. Silverstein, and K. Hoffman, Malformations induced in offspring of crowded and parabiotically stressed mice. *Teratology*, 10, 31-38, 1974.

Among the malformations and anomalies which were induced in fetuses of mice who

were parabiotically joined on days 6, 7, and 8 of pregnancy and in crowded pregnant mice, was cleft palate. Both experimental procedures caused an increase in mean maternal weight, an observation which provided support for the hypothesis of the authors that the teratogenic effects resulted from prolonged prenatal stress induced by the experimental conditions. (Lass)

Heathcote, G. M., The prevalence of cleft uvula in an Inuit population. *Amer. J. Physical Anthropology*, 41, 433-437, 1974.

The author has surveyed 853 native Inuit residents of the communities of Igloolik (229) and Hall Beach (68) and found four (5.88%) in Hall Beach and seven (3.06%) in Igloolik, for an overall total of 3.7%. He presents a discussion regarding the findings of other investigators, and he attempts to explain the relatively low incidence of this abnormality in the Inuit population. (Gregg)

Jones, K. L., D. W. Smith, B. D. Hall, J. G. Hall, A. J. Ebbin, H. Massoud, and M. S. Golbus, A pattern of craniofacial and limb defects secondary to aberrant tissue bands. *J. Pediatr.*, 84, 90-95, 1974.

Infants (7) have been studied who have a similar pattern of severe craniofacial and limb anomalies associated with aberrant tissue bands. The craniofacial anomalies consist of unusual encephaloceles, facial clefts and cranial plus midfacial distortion; the limb anomalies consist of constrictions, amputations and pseudosyndactyly. These defects are interpreted as being secondary to the early distorting and disruptive effects of aberrant tissue bands, the etiology for which is undetermined. Survival beyond the neonatal period has occurred in four of the five liveborn patients, indicating that early death should not necessarily be anticipated. Recurrence risk is apparently negligible. (This abstract is from *BioResearch Today—Birth Defects*, volume 3, October 1974, abstract number 13024.)

Kaplan, I., J. Dresner, Chava Forodischer, and Leah Radin, The simultaneous repair of cleft lip and palate in early infancy. *Brit. J. Plast. Surg.*, 27, 134-138, 1974.

The authors describe a surgical procedure which involves the simultaneous

repair of the cleft lip and palate in 13 infants between the ages of three and four months. They discuss the psychosocial effects, maxillary growth, ear infections, and speech development of these children. In light of their findings, they feel justified in the continuation of this surgical procedure on a routine basis. (Lass)

Kent, R. D., P. J. Carney, and L. R. Severeid, Velar movement and timing: evaluation of a model for binary control. *J. Speech Hear. Res.*, 17, 470-488, 1974.

Cinefluorographic analyses of the articulatory movements of two speakers were used to evaluate a binary model of velar control. To obtain precise timing data for movements of the tongue and velum, radiopaque markers were attached to these structures and then tracked by cinefluorography. It is argued that the binary control model does not survive rigorous empirical test because (1) it makes some predictions that are inappropriate for American English, and (2) the confirmation criteria used in previous reports were applied inconsistently. We suggest that if binary control models are to be used in making predictions about the timing of articulations, then the binary feature values should be interpreted by means of a systematic phonetics or an elaborated speech production model. We further suggest that sequences of articulatory movements may be organized in a hierarchical fashion, such that neuromotor instructions from the motor command system often are issued simultaneously for the tongue, velum, lips and jaw, even though the commands may not always apply to the same phonetic segment. (Authors' summary: Lerman)

Kopelman, A. E., F. W. McCullar, and L. Heggeness, Limb malformation following maternal use of Haloperidol. *J. Amer. Med. Assoc.*, 231, 62-64, 1974.

This is the report of the second case of severe limb malformations which appeared in the offspring of a mother who took Haloperidol (Haldol) during the first trimester of pregnancy. This drug is a tranquilizer used in the treatment of schizophrenia and agitated psychoses. At autopsy, multiple anomalies of the extremities were present, and there was a bicuspid aortic valve with a notch in one of its leaflets. Chromosome analysis demonstrated normal chromosomes. In a review of the literature,

it was noted that in mice which have been given this drug during pregnancy, the most common anomaly was cleft palate. The condition of the palate in this case was not recorded. Although the mother reported in the present paper also took methylphenidate hydrochloride (Ritalin), diphenhydantoin sodium (Dilantin), tetracycline, and "a decongestant for a cold" during the first trimester of pregnancy, the possibility of these drugs as teratogens or co-teratogens was not discussed. (Gregg)

Leist, K. H., and J. Grauwiler, Fetal pathology in rats following uterine-vessel clamping on day 14 of gestation. *Teratology*, 10, 55-68, 1974.

When the main uterine vessels of pregnant rats were clamped on the 14th day of gestation, fetal death rate and congenital anomalies increased. Among the resulting anomalies was cleft palate. It was shown that the malformations probably resulted secondarily from necrosis of mesenchymal tissues. (Lass)

Lister, G. D., The development of clinical records for plastic surgery and their computer storage. *Brit. J. Plast. Surg.*, 27, 47-58, 1974.

This article describes in detail the procedures involved in the development of appropriate clinical records which can be used for clinical research workers, as well as the computer storage of such records. (Lass)

Lister, G. D., and Helen L. Cameron, Coding of diseases and operations in the recording of plastic surgery patients. *Brit. J. Plast. Surg.*, 27, 59-66, 1974.

The authors describe in detail a diagnosis and operation coding system for plastic surgery patients which was developed from the International Classification of Diseases and the Classification of Surgical Operations. (Lass)

Minami, R. T., L. R. Morrill, and J. Weber, Jr., Intermaxillary fixation with orthodontic brackets bonded to teeth. *Plast. reconstr. Surg.*, 54, 492-494, 1974.

Plastic brackets bonded to teeth with subsequent intermaxillary fixation have been employed obviating the necessity for the application of arch bars. While not fully evaluated as yet, the technique shows

promise and it may conceivably be of use in complicated maxillary and mandibular reconstruction. (Cosman)

Minifie, F. D., J. H. Abbs, A. Tarlow, and M. Kwaterski, EMG activity within the pharynx during speech production. *J. Speech Hear. Res.*, 17, 497-504, 1974.

The authors observed EMG activity of the superior and middle pharyngeal constrictor muscles and made comparisons during normal and whispered productions of voiced and voiceless consonantal elements. The results indicated reduced EMG during the production of the voiced consonant /b/ when compared with the production of the voiceless consonant /p/. No difference in pharyngeal EMG activity was present during whispered and phonated productions. Greater EMG activity, as measured by amplitude, was associated with the production of vowels than with stop sounds. The authors feel that a most interesting observation was an inhibitory factor of constrictor muscle activity for voiced elements with less reduction for voiceless elements. (Lerman)

Nishimura, Hideo, Takashi Tanimura, Reiji Semba, and Chigako Uwabe, Normal development of early human embryos: observation of 90 specimens at Carnegie stages 7 to 13. *Teratology*, 10, 1-8, 1974.

(1) A systematic analysis of the relation between 2 parameters of developmental stage—clinically assessed embryonic age and growth—was made for 90 human embryos at Carnegie stages 7-13 from healthy pregnancies. (2) The data showed remarkable individual variation in the relation between age and developmental stage of embryos at stages 11-13. It appears that the mean age for these stages in our specimens was a few days greater than the corresponding age in the currently cited standards, although a definite conclusion must await further studies. (3) The relation between body length and developmental stages in our embryos was not different from the corresponding standards presented by various investigators. The relation of the number of somites to developmental stage and greatest length in 13 embryos at stages 9-11 was approximately in accord with that reported for several corresponding embryos by other investigators. (4) The oldest age for embryos at each stage in our data may

have practical use in denying a causal relation between the exposure of pregnant women to an exogenous agent at such a stage and the subsequent appearance of specific malformations in their progeny. (Authors' Summary: Lass)

Paradise, J. L. and C. D. Bluestone, Early treatment of the universal otitis media of infants with cleft palate. *Pediatrics*, 53, 48-54, 1974.

In 138 infants with cleft palate, secretory or suppurative otitis media was a universal complication. Middle ear aeration was instituted by means of myringotomy, aspiration of middle ear liquid, and insertion of tympanostomy tubes, and this procedure was repeated whenever recurrence of middle ear effusion followed blockage or extrusion of the tubes. In infants with either complete or incomplete clefts of the palate, satisfactory middle ear status could usually be maintained. Otorrhea through tympanostomy tubes occurred frequently, but usually responded promptly to treatment. Palate repair resulted in sharp improvement in middle ear status. Early relief of middle ear effusion and establishment and maintenance of middle ear aeration in infants with cleft palate may help maintain normal hearing acuity throughout infancy, with favorable implications for language and intellectual development, and may reduce the risk of permanent middle ear damage and hearing impairment. Further study is necessary to determine the long-term efficacy of this regimen. (This abstract is from *BioResearch Today—Birth Defects*, volume 3, October 1974, abstract number 11194.)

Rintala, A., and R. Ranta, Separate epignathi of the mandible and the nasopharynx with cleft palate: case report. *Brit. J. Plast. Surg.*, 27, 103-106, 1974.

A case of separate epignathi of the mandible and nasopharynx in the same patient is described. Resection of the epignathus resulted in long-term survival. (Lass)

Saito, H., Y. Okano, M. Furuta, H. Asamoto, H. Fujita, and T. Takeuchi, Temporal bone findings in Trisomy D. *Arch. Otolaryng.*, 100, 386-389, 1974.

The authors have presented a single case which had, among other congenital defects, harelip and cleft palate. They reported that temporal bone findings in an infant with trisomy D (13-15) may be summarized as

follows. The temporal bone showed multiple anomalies of the middle ear and the inferior part of the inner ear. The facial nerve bifurcated in the petrous portion of the right, and passed through the atretic external ear canal on the left. The stapes were of columellar shape on both sides. Slightly shortened bony cochlea housed a reduced clumped mount of Corti organ with good population of hair cells. The tectorial membrane and otolithic membrane of the sacculle were encapsulated with a layer of thin cells. The finding regarding the tectorial membrane suggests that the patient would have had deafness of inner ear origin. (Authors' summary: Gregg)

Schanche, D. A., Two facial handicaps that can be conquered. *Today's Health*, 52, 52-55, 1974.

This article published in a journal which is designed primarily for lay consumption, often in physicians' offices, is a well written treatise in layman's terms designed for the education of parents and others who might have some interest in the problem of and treatment of congenital facial defects. It is accompanied by a well-done graphic illustration. (Gregg)

Schendel, S. A., and R. J. Gorlin, Frequency of cleft uvula and submucous cleft palate in patients with Down's syndrome. *J. Dent. Res.*, 840-843, 1974.

Cleft uvula and submucous cleft palate are more frequent in patients with Down's syndrome than in the general population. It is felt that these patients have a genetic imbalance and are therefore a more susceptible to environmental factors especially in developmentally unstable structures such as the palate. (Luban)

Shah, Ravindra M., and A. P. Chaudhry, Ultrastructural observations on closure of the soft palate in hamsters. *Teratology*, 10, 17-30, 1974.

Subcellular events during soft palate closure in hamsters were studied electron microscopically. In the early stages the surface epithelium of the palatal shelves was 2-3 cell-layers thick and was separated from the underlying mesenchyme by an intact basal lamina. The epithelial cells contained few cytoplasmic organelles and were attached to each other by desmosomes.

During further development tonofilaments and lysosomes appeared in the epithelial cells. Prior to fusion the epithelia of the opposing shelves displayed thickening followed by desquamation of the superficial cells. Fusion occurred by means of newly formed desmosomes between the fresh surfaces of the opposing epithelia of the shelves, thereby forming an epithelial seam bounded on each side by the basal lamina. Subsequent thinning and fragmentation of the seam occurred as a result of autophagy, exfoliation, and extrusion of cells through the intercellular spaces. Macrophages appeared at a later stage of soft palate development and removed the cellular debris. At no time during these stages of palatogenesis was there evidence of penetration of the basal lamina on either side of the epithelial seam by the surrounding mesenchyme. (Authors' Summary: Lass)

Vallis, C. P., Hair transplantation to the upper lip to create a moustache: Case report. *Plast. reconstr. Surg.*, 54, 606-608, 1974.

The construction of a moustache employing free composite hair bearing scalp grafts is presented. The technique may have application to the disguising of unsatisfactory scars following lip reconstruction. (Cosman)

Velazquez, J. M., and F. Ortiz-Monasterio, Primary simultaneous correction of the lip and nose in the unilateral cleft lip. *Plast. reconstr. Surg.*, 54, 558-563, 1974.

Simultaneous reconstruction of the nasal and labial deformity in the unilateral cleft lip is reported by the authors. An external incision over the nose is employed to achieve the lift and motion required and a modification of the Millard type approach is employed in the treatment of the lip. Twenty-five patients have been operated upon, the youngest at 3 months, the oldest at 64 years. In 3 cases there was a step-like defect in the nasal skin scar and in 3 other cases the lip scar showed retraction requiring secondary revision. Four instances of inadequate correction of the medial crura of the alar cartilage were noted. Longer periods of follow up will be required before it can be stated that the procedure does not interfere with nasal growth. (Cosman)

ANNOUNCEMENTS

DR. F. CLARKE FRASER IS RECIPIENT OF AMERICAN CLEFT PALATE ASSOCIATION HONORS AWARD

For his outstanding achievements in the field of cleft palate, the Honors of the Association were bestowed on F. Clarke Fraser, Ph.D., M.D., teacher, scientist, and physician.

Born in 1920 in Norwich, Connecticut, Dr. Fraser received his B.S. degree from Acadia College in 1940 and his M.S. from McGill University in 1941. Since that time Clarke Fraser has remained at McGill where he received his Ph.D. and M.D. degrees in 1945 and 1950 respectively. Beginning as a lecturer in genetics in 1946, he is currently Professor of Genetics and Associate Professor of Pediatrics. In 1950, Dr. Fraser was appointed Director of the Department of Medical Genetics at Montreal Children's Hos-



pital and in 1960, he established the Human Genetics Section at McGill University. His training programs have provided leaders for both the research and clinical communities.

In honoring Dr. Fraser, the Association recognizes his distinguished achievements in genetics, teratology, and medicine. Dr. Fraser's development of an experimental model for the production of cleft palate in mice by injecting cortisone continues to provide insight into embryopathic mechanisms and developmental pathways. Knowledge derived from this model may provide the basis for the prevention of cleft lip and palate.

F. Clarke Fraser's writings on genetic counseling continue to update empirically derived data on cleft lip and palate and are used in determining the recurrence risks of these malformations.

In addition to his numerous publications, F. Clarke Fraser has served as president of the American Society of Human Genetics and the Teratology Society and as a member of the following distinguished committees: World Health Organization Expert Advisory Committee on Human Genetics (Geneva); The Expert Committee on Occurrence of Congenital Anomalies, Department of National Health and Welfare (Canada); The Genetics Training Committee of the National Institute of General Medical Sciences (U.S.), and many others.

The scope of his contributions has made F. Clarke Fraser a distinguished teacher, scientist, and physician. In bestowing the Honors of the Association, the members thank Dr. Fraser for his efforts on behalf of their patients, past, present and future.

HOWARD ADUSS, D.D.S.

COURSE IN SURGICAL TECHNIQUES IN CLEFT LIP AND PALATE TO BE PRESENTED BY UNIVERSITY OF IOWA

The annual course in cleft lip and palate surgical techniques will be held at the University of Iowa from October 20 to 25, 1975. The faculty will include a plastic and reconstructive surgeon, an otolaryngologist, an orthodontist, a maxillofacial prosthodontist, a speech pathologist, a pediatrician, a psychologist, and a social worker. All listed specialists are members of the cleft palate team in the Center for Congenital Anomalies of the Face at the University of Iowa.

The primary emphasis will be placed upon operating room demonstration of surgical techniques useful in correcting the primary and secondary deformities associated with cleft lip and palate. Didactic presentations will discuss all aspects of cleft management including preoperative and post-operative orthodontics, dental prosthetics, chronic ear disease, facial growth, and speech pathology.

Enrollment will be limited. Tuition is \$250.

For further information contact: Charles J. Krause, M.D., Department of Otolaryngology, University of Iowa Hospitals, Iowa City, Iowa 52242.

LANCASTER CLEFT PALATE CLINIC PRESENTS ITS 19TH ANNUAL SEMINAR

The H. K. Cooper Institute for Oral-Facial Anomalies and Communicative Disorders (Lancaster Cleft Palate Clinic), Lancaster, Pennsylvania, presents its 19th Annual Seminar, October 6-11, 1975.

Department Heads from the Clinical and Research Divisions of the Institute and the Milton S. Hershey Medical Center will present lectures and clinical demonstrations.

The program is designed for team management: surgeon, pediatrician, otolaryngologist, nurse, geneticist, orthodontist, prosthodontist, pedodontist, general dentist, speech pathologist, audiologist and social worker. Treatment procedures will be demonstrated.

Ten years of longitudinal material will be shared with the participants.

Tuition: \$300.00

For additional information and application write to: Robert T. Millard, Program Director, 24 North Lime Street, Lancaster, PA 17602.

CORRECTION OF REPRINT INFORMATION FOR APRIL, 1974, CLEFT PALATE JOURNAL

Reprint information for the following manuscript was inadvertently omitted in the Cleft Palate Journal. Vol. 11, April, 1974, "Animation and Cosmetic Balance in Repair of Congenital Bilateral Cleft Lip: A Modified Technique." Reprints of the article may be obtained by writing to the author: D. I. Kapetansky, M.D., 16400 North Park Drive, Suite 116, Southfield, Michigan 48075.

PAPERS FROM 2ND INTERNATIONAL CONGRESS ON CLEFT PALATE, AUGUST, 1973, AVAILABLE FROM SCANDINAVIAN JOURNAL OF PLASTIC AND RECONSTRUCTIVE SURGERY

Scandinavian Journal of Plastic and Reconstructive Surgery No. 1-2, Vol. 8, 1974 contains original articles based on papers and introductory remarks during panels given at the 2nd International Congress on Cleft Palate, Copenhagen, Denmark, August 26-31, 1973. The non-Scandinavian authors were chosen by the Scientific Program Committee after consultation with leaders representing the three specialties at the Congress: speech, dentistry,

and surgery. These articles together with the Scandinavian material from the Congress are presented.

This double issue may be bought separately at the price of Sw. kr. 80.- or US\$21.50 (postage included).

However, those interested may subscribe to the SCANDINAVIAN JOURNAL OF PLASTIC AND RECONSTRUCTIVE SURGERY, at the rate of Sw.kr.100.- or US\$25.- per annum, including postage and free supplements. Orders for 1974 placed promptly will include *supplement 11* Ragnar Adell: Regeneration of the Periodontium. An Experimental Study in Dogs, 1974—188 pp, illustrated; and *supplement 12* Karin Willmar: On le Fort I Osteotomy. A follow-up study of 106 operated patients with maxillo-facial deformity, 1974—68 pp, illustrated.

For subscriptions and other information contact: The Almqvist & Wiksell Periodical Company, Gamla Brogatan 26, Box 62, S-101 20 Stockholm 1, Sweden.

STUDY OF MOVEMENT AND DISTRIBUTION OF DENTISTS IN CANADA IS AVAILABLE

A limited number of copies of "DENTISTS IN CANADA—A Study of Movement and Distribution (1957–1970)" is available for distribution free of charge. Interested individuals or organizations may write for their copies to: DENTISTS IN CANADA, Box 8, University of Manitoba, Winnipeg, Manitoba, Canada, R3T 2N2.

CORRECTION OF REPRINT INFORMATION FOR JANUARY, 1975, CLEFT PALATE JOURNAL

Reprint information for the following manuscript was inadvertently omitted in the Cleft Palate Journal, Vol. 12, January, 1975, "Transverse Pharyngeal Flaps: A Dynamic Repair for Velopharyngeal Insufficiency." Reprints of the article may be obtained by writing to the author: D. I. Kapetansky, M.D., 16400 North Park Drive, Suite 116, Southfield, Michigan 48075.

To insure that deletion of reprint information does not recur, the printer has now specifically requested this information on the reprint order itself. (Editor)

Topical Index of Abstracts from the Cleft Palate Journal Volume 11 (1974)

J. DOUGLAS NOLL (National Abstracts Editor)

The titles and reference notations of all abstracts which appeared in Volume 11 (1974) of the *Cleft Palate Journal* are included in this listing. The articles are shown in alphabetical order, according to the last name of the senior author. The location of the abstract in the *Cleft Palate Journal* appears after the reference, in terms of volume, issue number, data, and page(s). For example the first entry is: Abbs, J. H., The influence of the Gamma Motor System on jaw movements during speech: a theoretical framework and some preliminary observations. *J. Speech Hear. Res.*, 16, 175-200, June 1973. Following this, the notation reads: 11(1), Jan 74, 87-88. This means that the abstract of that specific article is in Volume 11, issue number 1, January 1974, pages 87 to 88 in the *Cleft Palate Journal*.

Based upon the content of the abstract, each abstract was assigned to one or more of the topics listed below in the index. For example, abstract number 67 (Moller, K. T., M. Path, L. J. Werth, and R. L. Christiansen, The modification of velar movement. *J. Speech Hear. Dis.*, 38, 323-333, August 1973. 11(1), Jan 74, 88-89) is included under the index topics of Dynamics of Velopharyngeal Function, Instrumentation, Nasality, and Speech, as shown by the fact that the number 67 appears under each of these four headings in the index.

ANATOMY: 1, 13, 22, 29, 79

BONE GRAFT: 19, 41, 51, 53, 56, 70, 76

CHROMOSOME STUDIES: 18, 35, 87

CLASSIFICATION: 21, 59, 92

DENTAL (MISCELLANEOUS): 17

DENTAL (ORTHODONTIA): 7, 27, 73, 75, 76, 86, 91

DENTAL (PROSTHODONTIA): 8, 14, 28, 58, 73, 94

DYNAMICS OF VELOPHARYNGEAL FUNCTION: 63, 66, 67, 96

ELECTROMYOGRAPHY: 93

EMBRYOLOGY AND MORPHOGENESIS: 3, 4, 22, 29, 37, 45, 50, 55, 60, 61

EPIDEMIOLOGY: 20, 80

ETIOLOGY, TERATOLOGY, AND TERATOGENESIS: 6, 13, 16, 23, 26, 40, 44, 45, 68, 72, 83, 84, 92

GENETICS AND HEREDITY: 9, 10, 20, 25, 34, 42, 47, 77, 87, 92

GROWTH AND MORPHOLOGY: 27, 35, 50, 54, 56, 83, 87

HISTOLOGY: 56

INCIDENCE: 9, 20, 44, 80, 84

INDUCTION OF CLEFTS IN ANIMALS: 15, 16, 23, 26, 37, 40, 45, 61, 72

INSTRUMENTATION: 30, 67, 88

LIP SINUSES: 3

MAXILLARY ORTHOPEDICS: 31, 76

MISCELLANEOUS: 5, 31, 62

NASALITY: 30, 67, 82

OTOLOGY, OTOLARYNGOLOGY: 32, 42, 55

PATHOGENESIS: 4, 13, 77

PROSTHETICS: 11, 14, 24, 28, 39, 52

PSYCHOLOGICAL FACTORS: 33

SPEECH: 1, 29, 30, 63, 66, 67, 73, 88, 94, 96

SURGERY (LIP, NOSE, PREMAX- ILLA): 2, 27, 38, 71, 93, 95	SYNDROMES (BRANCHIAL ARCH): 4, 19, 74
SURGERY (MISCELLANEOUS): 12, 28, 32, 52, 57, 69, 70, 78, 79, 89, 90	SYNDROMES (DOWNS): 17, 33
SURGERY (MANDIBLE): 19, 39, 41, 49, 51, 52	SYNDROMES (MISCELLANEOUS): 13, 54
SURGERY (PALATAL): 38	SYNDROMES (OTHERS): 18, 34, 35, 36, 42, 43, 55, 65, 77, 81, 87, 92
SURGERY (SECONDARY PHAR- YNGOPLASTIES): 46, 48, 90, 96	SYNDROMES (PIERRE ROBIN): 64, 81
SYNDROMES (APERT, CROUZON): 47, 85	X-RAY (CINEFLUOROGRAPHY): 63, 66, 96

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