BOOK REVIEWS

BROOKSHIRE, BONNIE L. LYNCH, JOAN I., and FOX, DONNA R., *A Parent-Child Cleft Palate Curriculum; Developing Speech and Language.* Tigard, Oregon; C. C. Publications Inc., 1980, 123 pp., $15.95.

This is a paperback designed as a guide to help parents of cleft palate children aged from birth to 36 months assist and enhance their child's speech and language development and prevent the delays so commonly found in children with oro-facial deformities.

The book consists of two major parts: a curriculum for professionals and parents, and a section entitled parent information. The curriculum areas are Speech and Language content: cognition; Language Form: comprehension and expression; and Language Pragmatics: social use. They are divided into six six-months levels, each containing a listing of objectives, rationale, activities, suggested materials, and criteria (for evaluation and selection of activities). The language is simple, except for a few unexplained professional terms, such as "vegetative level, ear training . . . ", the materials suggested for use are those found in most homes, and most of the activities can easily be performed by any interested adult or older child. The items recommended for training appear drawn from the Gesell Developmental Schedules.

The Parent Information section contains discussion of the following: The cleft palate team, feeding, surgical management, repairing for surgery, maintaining normal hearing, language development, speech development, dental orthodontic and prosthodontic management, causative factors, sources of information, and selected readings. They attempt to answer the questions parents usually need to ask, and to prepare them for the problems and interventions their child will have to endure. The authors indicate that this book is the outgrowth of a pilot program designed to increase parental participation in a cleft lip and palate intervention program. It is described as a remediation program conducted by clinicians, with combined treatment by clinicians (on a weekly or biweekly basis) and by parents. It would appear to be most useful when used in this fashion, although it can also provide much needed information to educated parents who lack access to a cleft palate team or to trained clinicians. But these parents would experience difficulties with some of the items, particularly those concerning the development of correct articulation patterns.

Because this book is designed for parents of children with cleft lip and palate, much emphasis is of course placed on those areas characteristically affected by cleft palate, such as direction of airflow, resonance . . . With this reservation in mind, the book would also be helpful to clinicians and parents of language and/or developmentally delayed children, since it outlines simple activities which will enhance speech and language development in general.

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ABSTRACTS

ARGAMASO, R. V., SHPRINTZEN, R. J., STRAUCH, B., LEWIN, M. L., DANILLER, A. I., SHIP, A. G., and CROFT, C. B., The role of lateral pharyngeal wall movement in pharyngeal flap surgery, *Plast. Reconstr. Surg.*, *66*, 214–219, 1980.

Two hundred and two patients with pharyngeal flaps were assessed with nasopharyngoscopy and multiview fluoroscopy to determine the role of lateral pharyngeal wall movement post-operatively. Variations in the construction and insertion of flaps made it possible to create three categories made up of (1) those patients with long narrow flaps with high insertion, (2) those with short broad flaps with low insertion, and (3) those with intermediate sized flaps inserted in a position somewhere between the first two. It was found that, in all cases where there was no evidence of velopharyngeal insufficiency remaining, the major determiner of velopharyngeal closure was the medial excursion of the lateral pharyngeal walls to the sides of the flap. In flap failures, the causes for velopharyngeal insufficiency were inappropriate degree, level, and symmetry of the lateral pharyngeal wall motion. The authors are convinced that a preoperative assessment of the velopharyngeal closure mechanism would materially improve the results of the choice of the type of pharyngeal flap best designed to assist the particular patient in closure of the velopharyngeal port during speech. (Cosman)

BARLOW, S. M., KNIGHT, A. F., and SULLIVAN, F. M., Diazepam-induced cleft palate in the mouse: the role of endogenous maternal corticosterone, *Teratology*, *21*, 149–155, 1980.

This study reports on tests of the relationship between the induction of CP in mice by diazepam and changes in maternal corticosterone levels after treatment. Experiments were designed to determine if a low non-teratogenic dose of diazepam affects CP by altering endogenous corticosterone levels, to test the interaction between diazepam and endogenous corticosterone in CP induction, and to evaluate the effects of diazepam alone on maternal endogenous corticosterone levels. Mice of the Charles River CD-1 strain were treated with various doses of corticosterone or diazepam alone or in combination on day 14 of pregnancy. Plasma corticosterone levels were assayed after treatment, and fetuses were recovered for examination on days 18 or 19. Low doses of diazepam, rather than decreasing the incidence of stress-induced CP, potentiated the effect of food deprivation. It is suggested that the stress of fasting and immobilization due to heavy sedation may contribute to CP by raising the endogenous corticosterone levels. In combination with exogenous corticosterone, diazepam had no influence on the incidence of CP in comparison with that caused by corticosterone alone. It was observed that diazepam alone did elevate endogenous corticosterone levels in a dose-related manner in pregnant mice. This increase may be responsible for diazepam-induced CP in the mouse. The authors caution against the use of the mouse as a model in tests of diazepam as a CP-teratogen in light of the high endogenous level of corticosterone during pregnancy in this species. (Overman)

BELL, W. H., and JACOBS, J. D., Surgical-orthodontic correction of horizontal maxillary deficiency, *J. Oral Surg.*, *37*, 897, 1979.

The authors state that selected maxillary osteotomies using rapid maxillary expansion appliances are useful adjuncts to treatment of various clinical problems of

horizontal maxillary deficiency and associated crossbite. Their report reviews diagnosis, treatment planning, and necessary technical considerations.

A typical problem in individuals with repaired cleft palates is horizontal (transverse) maxillary deficiency. Most clinical failures associated with rapid maxillary expansion by orthodontic appliances have occurred in adults and were related to inability to expand the maxilla, tipping of the teeth, bending of the alveolar bone, and relapse. To prevent these problems, virtually all of the maxillary bone articulations have been sectioned. The initial determination of the existence and extent of deficiency in the transverse dimension must be made by positioning the mandibular model into an approximate Class 1 cuspid relationship with the maxillary model, or, in some cases, by having the patient position the mandible in a simulated Class 1 dental relationship.

The morphology of the arch also is of importance as is a consideration of the distance between the cuspids. This dimension will suggest alternative procedures of surgical orthodontics described by the authors.

The authors describe their technique in detail. It includes the use of a properly designed rigid, fixed, tooth-borne appliance that can produce orthopedic forces designed to produce a minimum of tooth movement and a maximum of bone repositioning. The surgical procedure, activation and stabilization of the expansion appliance, and the retention of the repositioned segments are described in detail. Other procedures, such as those required when palatal exostoses are present or when extraction of impacted or partially erupted maxillary third molars is indicated, are also discussed. Alternatives and indications for other surgical procedures are presented. (Beder)

Braun, T. W., and Sotereanos, G. C., Orthognathic and secondary cleft reconstruction of adolescent patients with cleft palate, *J. Oral Surg.*, *38*, 424–434; 1980.

The authors stress the multidisciplinary approach that includes surgical, orthodontic, and prosthetic treatment in the midfacial reconstruction in these patients. They state that, although the early surgery for correction of the deformity is generally desirable, growth may be adversely influenced by surgical intervention, the interruption of blood supply, or the formation of scars. The authors classify the secondary deformities as skeletal Class III deformity (pseudoprognathism), unilateral maxillary insufficiency, alveolar insufficiency, oronasal fistulas, and dentofacial deformities such as soft tissue deficiencies. The first three are discussed very fully as to clinical findings. Excellent illustrations are included. (Beder)

Brosnan, P. G., Lewandowski, R. C., Toguri, A. G., Payer, A. F., and Meyer, W. J., A new familial syndrome of 46, XY gonadal dysgenesis with anomalies of ectodermal and mesodermal structures, *J. Pediatr.*, *99*, 586–590, 1980.

Two 46, XY phenotypic female siblings aged 1½ and 8½ years had peculiar facies including cleft lip and palate, cardiac, renal, musculoskeletal, and ectodermal anomalies, short stature, streak gonads, and mild developmental delay. Previously reported cases of 46, XY gonadal dysgenesis have not had major associated malformations. These children present a different constellation of anomalies unlike those seen in other types of gonadal dysgenesis and represent a new familial syndrome of 46, XY gonadal dysgenesis. (Glaser)

Downs, M. A., Identification of children at risk for middle ear effusion problems, *Ann. Otol., Rhinol., Laryngol.*, *89*, 168–171, 1980.

This paper is a portion of the Proceedings of the Second International Symposium on the Recent Advances in Otitis Media with Effusion. The author identifies the individuals who have a high risk factor. These include those who have cleft palate, Down's syndrome, Kartgener's syndrome, a positive family history of otitis media, otitis media occurring before 18 months of age, prematurity, malnourishment, a history of child abuse, or allergies. Native Americans are also at increased risk. Special attention should be directed toward prevention and early treatment of those who fall into these categories. (Gregg)

Doyle, W. J., Cantekin, E. I., and Bluestone, C. D., Eustachian tube function in cleft palate children, *Ann. Otol., Rhinol., Laryngol.*, *89*, Supp. 89, 34–40; 1980.

This paper is a portion of the Proceedings of the Second International Symposium on the Recent Advances in Otitis Media with Effusion. The authors have attempted to relate otitis media to a functional obstruction of the eustachian tubes by two methods, the forced response test, and the inflation-deflation test. Forty-five children and adolescents with cleft palates were tested by these means. Cleft palate children had limited ability to open the eustachian tubes by swallowing and little ability to alter the middle ear pressure by either the Valsalva or the Toynbee maneuvers. In a majority of the children with clefts, the resistance of the tube increased with swallowing suggestion constriction rather than dilatation. The cleft palate individuals had severe functional obstruction of the tubes related primarily to inability of the tensor veli palatini muscle to dilate the tube actively during swallowing. This finding suggests that this is the major factor responsible for otitis media in these people. (Gregg)

Doyle, W. J., Cantekin, E. I., Bluestone, C. D., Phillips, D. C., Kimes, K. K., and Siegel, M. I., Nonhuman primate model of cleft palate and its implications for middle ear pathology. *Anna. Otol., Rhinol., Laryngol.*, *89*, Supp. 68, 41–46, 1980.

This paper is a portion of the Proceedings of the Second International Symposium on the Recent Advances in Otitis Media with Effusion. Rhesus monkeys were used as experimental models to study the effect of a surgically created cleft palate upon eustachian tube function and otitis media. Middle ear status was evaluated over a five-month period prior to surgical clefting and by long-term follow-up post-operatively utilizing inflation-deflation and forced response tests. Seventeen of the 18 ears in the study developed otitis media, and post-operative middle ear pressures initially showed high negative values. High positive middle ear pressures were found two months post-operation. The forced response test showed no change in passive and active tubal resistance or in the effectiveness of tubal dilatation that could be attributed to the surgery. The inflation-deflation test

demonstrated higher opening and closing pressures and altered ability to equilibrate applied positive and negative pressures post-operatively. Eustachian tubal function and middle ear status following the operation seemed to improve with time. The authors feel that the pathogenesis of otitis media in these experimental models may have been due to altered eustachian tube function associated with an altered nasopharynx and not to abnormal tensor veli palatini muscle function. (Gregg)

FRIEDLINE, C. W., Immediate prosthetic obturation of the partially resected maxilla in edentulous patients, *J. Prosth., Dent., 44*, 72–73, 1980.

In cases of surgically resected maxillas, impressions are taken prior to surgery. An outline of the surgical site is marked on the model. A patient's denture can be used or a new clear acrylic base can be prepared. Retention is secured by the use of steel Kirschner wires prepared prior to surgery and inserted immediately at the operating table through drilled holes in the remaining part of the maxilla. (Goldenberg)

GANDHI, N. K., and BHATT, N. A., Obturator-orbital prosthesis, *J. Prosth. Dent., 44*, 336–337, 1980.

A technique to restore extensive defects which include the orbit, maxilla, and zygomatic bone is described. First, a hollow tube obturator is fashioned and inserted. Using this as though the palate were intact, upper and lower dentures are made in a conventional method. Retention is, of course, a great problem and is partially aided by inserting stainless steel springs in the disto-buccal flanges of the upper and lower dentures bilaterally. The spring-back action seems to be effective. Impressions are then taken of the orbit while the other prostheses are in place. The obturator and the orbital prosthesis are then attached with quick-cure acrylic. Insertion is made through the maxillary void. The eye is prepared, processed, and inserted into the previously prepared acrylic orbital base. (Goldenberg)

GORDON, N. C., and BROWN, S. L., Closure of oronasoantral defects: report of case. *J. Oral Surg., 38*, 600–605, 1980.

The authors note that there are well established reasons for grafting primary and secondary palatoalveolar communications with the nose or antrum. The loss of continuity of the palate or alveolar ridge in growing children may result in collapse of the dental arch and of the anterior maxillary contour, disruption of the occlusion and eruption pattern, and changes in midfacial growth with esthetic consequences. A brief review of flap techniques for closure of the palate is presented. The importance of delayed closure and careful planning and preparation of the flap is emphasized. (Beder)

GOWDAR, K., BULL, M. J., SCHREINER, R. L., LEMMONS, J. A., and GRESHAM, E. L., Nasal deformities in neonates, *Am. J. Dis. Child., 134*, 954–957, 1980.

Seventy-two infants were treated with nasal continuous positive airway pressure for one day to five weeks, and nasal deformities developed in none. One hundred thirty-six infants were treated with nasotracheal tubes, and eight (6%) were found to have nasal deformities. There was a strong correlation between duration of intubation and birth weight and the presence of deformities. In no infant receiving ventilation therapy for less than six days did nasal deformities develop. The incidence of nasal deformities in infants weighing less than 1,000 g. was 50% whereas, in infants heavier than 1,000 g., it was 2.4%. No infant had clinical symptoms suggestive of subglottic stenosis during the first year of life. The data do not support the use of routine tracheostomy in newborn infants even after prolonged intubation. (Glaser)

JACKSON, I. T., MCGLYNN, M. J., and HUSKIE, C. F., Velopharyngeal incompetence in the absence of cleft palate: Results of treatment in 20 cases, *Plast. and Reconstr. Surg., 66*, 211–213, 1980.

Since 1975, 20 patients from five to 14 years of age with velopharyngeal incompetence but with no evidence of any form of cleft palate have been treated. After initial assessment, 10 patients were felt to have velopharyngeal disproportion because the palate was too short for effective closure during speech. Because neither cephalograms nor pharyngeal molds were made, the authors are not in a position to say whether the palate was congenitally short or the pharynx congenitally large. A second group of patients consisted of four who developed speech disability immediately after adenoidectomy. Four other patients had incoordinated palatal movement as the cause of their velopharyngeal incompetence, and at least three of these patients had cerebral palsy. No diagnosis of etiology was made in the last two patients. The majority of patients were treated by sphincter pharyngoplasty of the Orticochea type. Other details of their care are given. (Cosman)

JACKSON, I. T., and SOUTAR, D. S., The sandwich Abbe flap in secondary cleft lip deformity, *Plast. and Reconstr. Surg., 66*, 38–45, 1980.

The authors advocate the dissection of the orbicularis muscle on either side of the incision made to insert on Abbe flap into the upper lip and the suturing of the muscle across the defect with the skin, the mucosa, and the vermillion defects to be covered. The Abbe flap from the lower lip contains its own muscle with skin and mucosa to be fitted over and beneath the previously closed muscle bridge. The exact handling of the muscle remaining in the lower lip is not detailed. Presumably it is kept in situ and the skin closed from side to side. Motion of the lip and a natural appearance are the advantages claimed for this procedure. Comments by Dr. Ralph Millard question the efficacy of the procedure and point to some of the technical difficulties to be encountered. Further documentation must be presented before this modification of a long accepted procedure can be properly judged. (Cosman)

JAHRSDOERFER, R., Congenital malformations of the ear. Analysis of 94 operations, *Ann. Otol., Rhinol., Laryngol., 89*, 348–352, 1980.

The author studied a patient population of 73 individuals, 20 of whom had identifiable craniofacial anomalies. These anomalies included osteogenesis imperfecta—4, hemifacial microstomia—4, Treacher Collins syndrome—3, Cruzon syndrome—3, Apert's syndrome—2,

Klippel-Feil anomaly—2, ectodermal dysplasia—1, and Hallerman-Streiff syndromes 1. In these patients, 94 operations were performed upon 80 ears. Operative findings included 13 patients with congenital absence of the oval window, 6 who had congenital cholesteatoma, and 5 with vascular anomalies in the middle ear. The surgical procedures utilized are discussed.

The author concluded: 1) surgery on a unilaterally atretic ear is usually best delayed until young adulthood except in selected cases. 2) If good hearing is obtained in one ear in a patient with bilateral canal atresia, the second ear should be treated essentially as a unilateral atresia. 3) Fenestration of the semicircular canal should be avoided. When the labyrinthine windows are missing and hearing is not improved by labyrinthotomy, a canalplasty should be done, and amplification with an ear level hearing aid should be utilized. 4) Congenital facial nerve paralysis does not absolutely contraindicate surgery, but it may warn of severe dysplasia in the middle ear. (Gregg)

JAMES, R. B., Surgical closure of large oroantral fistulas using a palatal flap, *J. Oral Surg.*, *38*, 591–595, 1980.

The author describes a variation of the island flap used in cleft palate surgery. Its high success rate is attributed to the flap's excellent blood supply, bulk, and mobility. It is a one-stage local procedure that uses only the tissue required to close the defect. Thus, oral health is rapidly restored and necrosis of the palatal bone is not a problem. The island is not sectioned free until most of the factors that will jeopardize the flap have been evaluated. Granulation of the denuded bone requires two to three months. (Beder)

KATSUKI, T., GOTO, M., and OTSUKI, H., A sliding caliper and a stencil used for Cronin-type lip repair, *J. Jap. Cleft Palate Assn.*, *3*, 31–36, 1978.

The aim of the paper is to present new equipment which facilitates a design for the Cronin-type lip repair. One is a jig of various sizes for the triangular flap and the other is a sliding caliper to measure the vertical heights of both the normal and the cleft side from the columella base to the tip of the Cupid's bow. (Machida)

KUHN, E. M., BABIARZ, B. S., LESSARD, J. L., and ZIMMERMAN, E. F., Palate morphogenesis. I. Immunological and ultrastructural analyses of mouse palate, *Teratology*, *21*, 209–233, 1980.

Earlier studies have indicated that fetal mouse palates synthesize actin and myosin just before elevation at a rate equal to that of tongue muscle. In order to localize and characterize the nonmuscle contractile proteins in the palate of A/J mice, the authors undertook an immunofluorescence and electron microscopy study of selected regions of the palate. The objective of the study was to investigate the possibility that such non-muscle contractile proteins function to elevate the palatal shelves. Reaction with antibodies to mouse skeletal muscle actin and chicken gizzard myosin demonstrated a general pattern of fluorescence throughout the palate, concentrated at the periphery of the cells. Ultrastructural observation revealed bundles of 70Å microfilaments along the cell peripheries and concentrated in filopodia-like projections. Cells in the region of palatal shelf elevation were observed to form an entwined network of the oral epithelium. The authors correlate this cell arrangement with those of other areas of morphogenetic movement and suggest that such a combination of cell arrangement and the presence of contractile proteins may contribute to an intrinsic force which could result in elevation of the palatal shelves. (Overman)

LEMPERLE, G., and RADU, D., Facial plastic surgery in children with Down's syndrome, *Plast. Reconstr. Surg.*, *66*, 337–345, 1980.

The authors propose and illustrate the effects of six minor corrections in the faces of children with Down's syndrome to improve the facial expression. Reduction of macroglossia is significant and, in addition, appears to facilitate phonation. Augmentation of the bridge of the nose tends to efface the epicanthus. The lid axis is treated with elevation of the lateral canthi and depression of the medial canthi. A hypertonic lower lip and the microgenia can also be repaired. The article is followed by two further articles of discussion which raise the natural questions that must be considered in advocating surgery of this nature for patients with a fundamentally untreatable problem. Nevertheless, it appears that, in selected patients with Down's syndrome, the surgical manipulations may add to the quality of life available. (Cosman)

LEVY, M., SCHORTZ, R. H., BLUMENFELD, I., and LEPLEY, J. B., A flexible moulage for the fabrication of an orbital prosthesis, *J. Prosth. Dent.*, *44*, 436–438, 1980.

In the fabrication of an orbital prosthesis, the first impression is taken in alginate. This material is then covered with gauze and plaster of paris. This prevents distortion when pouring the working model in acrylic resin. A wax pattern is made, sculpted, and characterized. The wax pattern is repeatedly inserted into the defect, and the operator takes advantage of some undercut areas for added retention. Curing of the silicone prosthesis takes place against the acrylic resin model and is quite accurate. (Goldenberg)

MOORE, D. J., and MOSBY, E. L., Prosthetic treatment for orthognathic surgery patients, *J. Prosth. Dent.*, *44*, 484–490, 1980.

Where routine prolonged orthodontic treatment is not advised or is inappropriate, surgical correction of malaligned jaws is one alternative. Occasionally, proper orthodontic supervision is not available, and surgical correction becomes the treatment of choice. The time element in adult patients is also a consideration. Some treatment to align the teeth and place them in a more esthetic relationship is always of help. If this is not feasible, consideration should be given to prosthetic management. After proper impressions are taken and study models made, corrections are made on the models, and the models are articulated and necessary splints and stents made for future use during the surgical procedure. After surgery, it may be necessary to use transitional appliances together with intermaxillary traction and elastics to maintain the new position with a bit of over-

correction to withstand the pull of the musculature. (Goldenberg)

MUNRO, I. R., and CHIR, B., One-stage reconstruction of the temporomandibular joint in hemifacial microsomia, *Plast. Reconstr. Surg.*, *66*, 699–710, 1980.

The authors detail two types of surgical approaches for patients with hemifacial microsomia. The Type I procedure for patients whose maxilla is affected below the level of the inferior orbital foramen involves a maxillary osteotomy of the Le Fort I type with excision of bone on the unaffected side and addition of bone on the affected side with the maxilla rotated on the midline as a hinge. In addition, the normal side of the mandible is sectioned sagitally and recessed, and the ramus of the mandible is replaced with a rib graft whose cartilaginous condylar head is butted on the zygomatic arch. In the Type II procedure designed for patients in whom the deformity involves a smaller than normal zygomatic arch and an upward displacement of the orbital floor, the Le Fort I maxillary osteotomy is done high on the unaffected side, and the osteotomy on the affected side is of a type Le Fort III with a division carried into the orbital floor and up the lateral orbital rim. The maxilla is again rotated around the midline and fixation achieved by suturing the expanded orbital rim onto itself and forming both a zygoma and a mandibular ramus out of split rib grafts. The normal side mandible requires a sagittal osteotomy as before. A number of cases are illustrated. The authors feel that even in very young patients surgery is indicated although it may require repetition in the course of facial growth. Because of the presence of the tooth buds in patients operated upon prior to the eruption of permanent teeth, the maxillary osteotomies must be very high to avoid damage. (Cosman)

NUSINOV, N. S. and GAY, W. D., A method for obtaining the reverse image of an ear, *J. Prosth. Dent.*, *44*,68–70, 1980.

For sculpting an artificial ear, the authors describe a technique for carving, orienting the ear in space, tinting, and reproducing the prosthesis as a fitting mate to the remaining ear. The result should be a mirror image of the other ear. A photograph of the remaining ear is utilized as well as a tracing paper outline which is reversed and traced on clay prior to sculpting. (Goldenberg)

RAZEK, M. K. A., Prosthetic feeding aids for infants with cleft lip and palate, *J. Prosth. Dent.*, *44*, 556–561, 1980.

An appliance to obturate the defect of an infant with cleft lip and palate will aid in feeding. An acrylic plate fabricated in the usual manner is fitted with lateral stainless steel arms which fit bilaterally against the cheeks under slight compression to aid retention. Acrylic pads are fashioned at the ends of the steel arms to act as a cushion to prevent irritation of the tissues. The appliance combined with normal infant instincts does much to aid in feeding. (Goldenberg)

ROSENMAN, Y., RONEN, S., EIDELMAN, A. L., and SCHIMMEL, M. S., Ankyloblepharon filiforme adnatum: congenital eye-band syndromes, *Am. J. Dis. Child.*, *134*, 751–753, 1980.

Three infants had congenital eyelid bands (ankyloblepharon filiforme adnatum) in association with cleft lip and palate. A review of all previously reported cases of ankyloblepharon filiforme adnatum was carried out, and a new classification of the various clinical types of this condition was proposed. This new classification should aid in genetic counseling. (Glaser)

SHPRINTZEN, R. J., MCCALL, G. N., and SKOLNICK, M. L., The effect of pharyngeal flap surgery on the movements of the lateral pharyngeal walls, *Plast. Reconstr. Surg.*, *66*, 570–573, 1980.

One hundred patients with velopharyngeal insufficiency secondary to repaired cleft palate or unrepaired submucous cleft palate were the subjects of the study. Subjects were studied with a flexible fiberoptic nasopharyngoscope, multiview videofluorscopy, and, when possible, nasopharyngoscopy. The majority of patients showed no change in lateral pharyngeal wall movement post-operatively. Accordingly, it seems likely that, in many individuals, if the pharyngeal flap constructed is not as broad as the velopharyngeal gap, velopharyngeal insufficiency and hypernasality are likely to persist because most often the lateral pharyngeal wall movement will not adapt to the presence of the new structure in the pharynx. (Cosman)

SILVERMAN, F. N., STREFLING, A. M., STEVENSON, D. K., AND LAZARAUS, J., Cerebro-costo-mandibular syndrome, *J. Pediat.*, *97*, 416, 1980.

The cerebro-costo-mandibular syndrome is characterized by cerebral maldevelopment and/or malfunction, costal deficiencies, and micrognathia. Cleft palate and glossoptosis are frequently present and contribute to the common presenting sign, neonatal respiratory distress. Intrauterine and postnatal growth retardation are common. Familial cases are rare, and the mode of transmission is uncertain. The deficiencies in the posterior portion of affected ribs are the sine qua non for diagnosis; roentgenographic confirmation is required. Since the first description of this pattern of prenatal growth defect in 1966, 19 patients who fulfill the criteria for diagnosis have been reported. The authors present three additional cases, one of which includes roentgenographic-pathologic correlations, and summarize the combinations of features present in previously described cases. Pulmonary complications incidental to lack of thoracic cage support result in poor prognosis for survival. (Glaser)

SINGHI, S., SINGHI, P., and LALL, K. B., Congenital asymmetrical crying facies, *Clinical Pediat.*, *19*, 673–678, 1980.

Congenital asymmetrical crying facies, a minor congenital anomaly resulting from hypoplasia or the absence of the depressor muscle of the angle of the mouth (musculus depressor anguli oris), manifests itself as lower lip asymmetry during crying. In a prospective study of 1,600 neonates born at the J.L.N. Medical College in Ajmer, India, during the period from January, 1979, to August, 1979, 10 infants (6.3 per 1,000 infants) had asymmetrical

crying facies. Two of the 10 affected neonates also had congenital heart disease (one ventricular septal defect and one tetralogy of Fallot) compared to three out of 1,590 members of a control group (p 0.001). Five babies had other minor congenital malformations. Four of the 10 mothers of probands and three of 12 siblings had the same anomaly suggesting a familial etiological factor. No noxious obstetric or prenatal factor could be identified. At a follow-up examination three to six months after birth, all of the infants showed normal growth and development although the effects of the anomaly persisted. The authors suggest that asymmetrical crying facies is a commonly occurring minor congenital malformation and, in its presence, a thorough search for other congenital malformations, especially of the cardiovascular system, should be made. (Glaser)

STREISSGUTH, A. P., LANDSMAN-DWYER, S., MARTIN, J. C., and SMITH, D. W., Teratogenic effects of alcohol in humans and laboratory animals, *Science*, *209*, 353–361, 1980.

The authors assess the problem of teratogenicity of alcohol consumption in the prenatal period in humans and experimental animals through reports of clinical studies, behavioral studies, and epidemiological studies and in controlled laboratory experiments in animals. In humans, the effects of two or three or more alcoholic drinks per day during pregnancy can range from the fetal alcohol syndrome to reduced birth weight in offspring. Exposure of animals to alcohol may result in fetal death, malformations, and growth deficiencies as well as in behavioral and developmental abnormalities. The authors cite a report on 245 human infants affected by the fetal alcohol syndrome. Cleft lip and/or palate were reported to occur "occasionally" in this group. (Gregg)

TAMAKA, Y., GOLD, H. O., and PRUZANSKY, S., Copper plated molds for facial prosthesis, *J. Prosth. Dent.*, *44*, 445–449, 1980.

A method of fabricating a metal surfaced model utilizing copper plating technique is described. The result is a lightweight accurate model which is heat resistant. (Goldenberg)

UPTON, J., MULLIKEN, J. B., HICKS, P. D., and MURRAY, J. E., Restoration of facial contour using free vascularized omental transfer, *Plast. Reconstr. Surg.*, *66*, 560–567, 1980.

Following appropriate bony modifications, patients with first and second branchial arch syndrome and patients with Romberg's disease have been operated upon using omental fat free vascular transfers with up to four vessel end-to-end anastomoses preserving facial septa between the points of fat insertion so as to prevent late migration of the additional fatty tissue provided. Thirty cadaver dissections confirmed the patterns of vascular distribution in the omental vessels and three cases are described in which this free omental transfer was utilized clinically. In a comment following the article, Dr. Jurkiewicz indicates the possible validity of the compartmental dissection of the face to obviate gravitational descent of the omental transplant and reports nine patients in whom omentum had been used to obviate the effect of either trauma, hemifacial microsomia or a hemifacial atrophy. (Cosman)

VECCHIONE, T. R., Construction of the cupid's bow, *Plast. Reconstr. Surg.*, *65*, 830–833, 1980.

In the repaired cleft lip in which a philtral dimple and cupid's bow has not been created but in which a white line exists, the author describes the excision of an ellipse of vermillion beneath the white line and the transposition of that vermillion as a free graft to the vermillion edge to make a vermillion tubercle. The white line is sutured down into the defect created, and a full thickness preauricular or submental graft is employed to create the philtral depression just above the white line. (Cosman)

WAKEFIELD, C. W., Laboratory contamination of dental prostheses, *J. Prosth. Dent.*, *44*, 143–146, 1980.

Prosthetic appliances are fabricated in the dental office and then sent for final processing in a laboratory. This final stage is outside the supervision and control of the operating prosthodontist. Cultures and microscopic studies show that dentures and other acrylic appliances often are returned to the dental office in a contaminated state. Prosthodontists must address themselves to this possibility especially since some prostheses are inserted in the operating room immediately following surgery. Sterilizing solutions could be used at the laboratories and prostheses immersed after delivery. With all the other risks inherent in surgical procedures, potential sources of infection are not welcome. The professional team involved should address itself to this possible added risk. (Goldenberg)

YUNIS, E., and VARON, H., Cleidocranial dysostosis, severe micrognathism, bilateral absence of thumbs and first metatarsal bone and distal aphalangia, *Am. J. Dis. Child.*, *13*, 649–653, 1980.

Five patients from three families are described as having a new genetic syndrome. The features include cleidocranial dysostosis, bilateral absence of the thumbs and of the distal phalanges of the fingers, hypoplasia of the first metatarsus, absence of the distal phalanx and hypoplasia of the proximal phalanx of the big toe, pelvic dysplasia, bilateral hip dislocation, a constant facial dysmorphism with sparse hair, peculiar ears, severe micrognathism, and retracted and poorly delineated lips. The existence of consanguinity in two of the families, both with two affected siblings, as well as the lack of sex predilection, allows the authors to postulate that this syndrome is inherited in a recessive manner. (Glaser)

ANNOUNCEMENTS

FORUM ON DENTAL RADIOLOGY TO BE SPONSORED BY THE NATIONAL CENTER FOR HEALTH CARE TECHNOLOGY

"Dental Radiology" will be the topic of a technology assessment forum June 29 through July 1, 1981 at Stouffer's National Center Hotel, Arlington, Virginia, located in the metropolitan Washington, D.C. area. Sponsored by the National Center for Health Care Technology, the conference will address issues related to appropriate and cost effective use of diagnostic dental radiology.

Existing and emerging diagnostic technologies in dentistry will be assessed and consensus sought on their application. Conferees will also propose strategies for implementation of recommendations developed at the conference. Participants will include dentists (including special interest groups such as dental radiologists and oral surgeons), physicists, radiation biologists, economists and other allied health professionals and consumers.

The Center was authorized by Congress in 1978 to conduct and support assessments of medical technology; its mission is to evaluate the medical, economic, ethical, legal and social implications of health care technologies. This meeting is open to the public and there is no registration fee. The Center welcomes attendance by health professionals and interested private citizens.

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For administrative information, contact: Elaine M. Kokiko, Executive Vice President, Moshman Associates, Inc., 6400 Goldsboro Road, Washington, D.C. 20034.