Preface Cleft lip and palate

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Guest Editor

The last issue of the *Clinics in Plastic Surgery* that was devoted to the management of patients with clefts of the lip and palate was published over 10 years ago (October 1993). Since then, several advances, modifications, and refinements of surgical techniques and treatment protocols have been described and some studies with long-term results were published. Some surgical techniques were abandoned because of sub-optimal long-term results, and some promising ideas (e.g., fetal correction of cleft lip) were not further pursued because of complex ethical implications and the potential high risk for the mother and the fetus.

Preoperative orthopedic techniques with mostly passive but also active devices are currently widely used in preparation for unilateral and bilateral cleft lip repair. Thus skeletal relationships are improved preoperatively and the surgeon is given the opportunity to repair the lip under less tension and more optional conditions. Preoperative manipulations of nasal cartilages with naso-alveolar molding and other devices also gained some popularity and have been incorporated in some treatment protocols.

Advocates of this technique have demonstrated that with these appliances the alar cartilages are slowly “molded” in a more favorable position facilitating the surgical correction of the nasal deformity. Drawbacks include additional expenses, multiple visits for adjustment, and the possibility of overstretching the nostril during treatment.

Simultaneous correction of the coexisting nasal deformity with undermining and positioning of the alar cartilages in a more symmetric and aesthetically appropriate position is now incorporated in most treatment protocols. Several authors have presented long-term analysis of their results with such techniques. They have demonstrated that such manipulations at a very young age do not have detrimental effects on nasal growth and appearance when carefully performed without extensive cartilage and lining excisions that could result in residual intranasal scarring. Techniques of cleft lip and palate repair have also been refined, resulting in consistent improvements of short- and long-term functional and aesthetic outcome of these procedures and reduced need for revisions.

The greatest advancement of the last decade in the field of cleft and craniofacial surgery resulted from the introduction of distraction osteogenesis by Dr. J. McCarthy. With this technique, deformities of the midface and mandible can be managed and corrected much earlier than with the traditional osteotomy techniques, without the need for complex and lengthy procedures and without use of bone grafts. More favorable skeletal relationships are thus achieved with this approach at a younger age; in addition, the soft tissue envelope is simultaneously expanded, achieving improved occlusion, function, and facial harmony.

Our knowledge of facial development and growth has significantly improved, and several etiologic fac-

tors related to facial clefting have been identified. It is hoped that with the description of the human genome scientists will be able to further explore and identify genes and factors responsible for facial development, as well as individuals at risk, and try to better understand the complex etiology of clefts of the lip and palate.

Multidisciplinary management of patients with clefts of the lip and palate has been well recognized and is considered to be the standard for cleft care. The guidelines established by the American Cleft Palate–Craniofacial Association provide an excellent framework of care and include recommendations regarding interdisciplinary teams and patient evaluation and care by each team's specialists. With accumulated, improved knowledge and experience, superior results have been achieved. However, comprehensive evaluation and analysis of functional and aesthetic results still remains problematic, and the need for well-planned and well-designed ethical, multicenter, prospective, long-term studies has been clearly recognized. This is an area that requires significant attention in the near future. Information gained from such studies could provide us with quantifiable, nonbiased data and assist us to critically evaluate our results, modify some surgical techniques and treatment protocols, and further improve overall patient care.

Despite all advances, some patients still receive suboptimal care because some necessary services—including secondary surgical procedures, dental and orthodontic care, speech therapy, and psychology—

are still not covered or are only partially covered by state agencies and third-party payers. Patients with facial clefts deserve and should be able to receive full habilitation. It is therefore our duty and responsibility to increase our efforts, further educate and convince all involved parties about the importance and necessity of complete coverage of all services necessary for complete functional and aesthetic habilitation of patients born with clefts of the lip and palate, and allow them to excel in life as productive citizens without the burden and stigma of their birth defect.

This issue of the *Clinics in Plastic Surgery* includes an update of the currently accepted treatment protocols for patients with cleft lip and palate. I am grateful to the multidisciplinary group of specialists who devoted a great amount of their time to prepare and submit superb articles presenting cutting-edge ideas based on their vast experience and knowledge.

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