

19th American Dental Congress

December 08-10, 2016 Phoenix, USA

Role of an orthodontist in cleft lip/palate rehabilitation

A Arif Yezdani^{1,2}

¹Bharath University, India

²Sree Balaji Dental College and Hospital, India

Clefts of lip and palate are one of the most common craniofacial anomalies with a multifactorial inheritance with genetic and environmental factors responsible for its occurrence with a 70% incidence of non-syndromic cleft lip with or without cleft palate and a 30% syndromic cleft lip with or without cleft palate. The incidence of cleft lip and palate in India is 1:500 live births with unilateral cleft lips predominant over bilateral cleft lips with left sided unilateral clefts more common than right sided ones. In females, isolated cleft palate is more common as compared to males in whom the incidence of cleft lip is higher. Un-operated cleft lip/palate subjects exhibit normal facial growth whereas surgery dependent on its timing could produce mid-facial growth problems. Nevertheless, esthetics, psychosocial reasons and speech mandates a multidisciplinary treatment approach for management of such patients. This presentation would deal with the role of orthodontist in the treatment of cleft patients. The orthodontist is one of the first few specialists to meet the parents and infant. Informed reassurance, parental counseling, dietary counseling and fluoride prescription is the first step towards management of cleft cases. In bilateral clefts, pre-maxillary segments must be retruded. Pre-surgical infant orthopedics carried out at three to six weeks makes use of intraoral appliances to separate the collapsed lateral maxillary segments which along with elastic strapping across prolabium restrains pre-maxillary growth. Acrylic obturators can be used for feeding difficulties. Pre-surgical nasoalveolar molding, a nonsurgical technique, is effective in infants to reduce the size of intra-alveolar cleft by molding of bony segments, surrounding deformed soft tissues and cartilage in the cleft nose. The orthodontist has to effectively manage the anteroposterior, transverse and vertical dimensions of the maxillary and mandibular dental arches in the mixed and permanent dentition. Skeletal class III malocclusions with retrognathic maxilla can be treated with protraction headgear therapy around six to eight years of age. W-arch, quad-helix, nickel titanium palatal expanders or other types of expansion appliances at 9-10 years of age are used to correct anterior and posterior cross bites. A secondary bone graft (8-11 years) is performed prior to cleft canine eruption and active orthodontic treatment is started after eruption of canine. Comprehensive orthodontic treatment with pre-adjusted edgewise appliances can be used around 12-13 years of age for orthodontic traction of impacted teeth, precise positioning of teeth and arch coordination. Chin cup headgear therapy can be used to restrain//redirect mandibular growth. After completion of growth period, pre-surgical and post-surgical orthodontics may be deemed necessary for the cleft patients who warrant orthognathic surgery.

Biography

A Arif Yezdani has obtained his BDS in 1985 and MDS in 1989 both from University of Madras, India. He has worked abroad as a Consultant and Specialist in a prestigious Specialist Dental Centers of Ministry of Health, Kingdom of Saudi Arabia. He has presented various scientific papers both in national and international conferences, symposiums and workshops. He was the Co-Chairman of a scientific session of an international symposium and of a national workshop and also Course Director of a workshop on Accelerated Osteogenic Orthodontics. He was also Coordinator for Indian Academy of Aesthetic and Cosmetic Dentistry (IAACD) and Colgate-IDA "Future Dental Professionals" program. Presently, he is a Convener of Clinical Society Meetings in Sree Balaji Dental College and Hospital, Chennai, India and has convened 112 clinical society meetings till date.

arifyezdani@yahoo.com

Notes: