RECENT ADVANCES IN MANAGEMENT TECHNIQUES OF CLEFT PALATE

An essay submitted for the partial fulfillment of the master degree of phoniatrics

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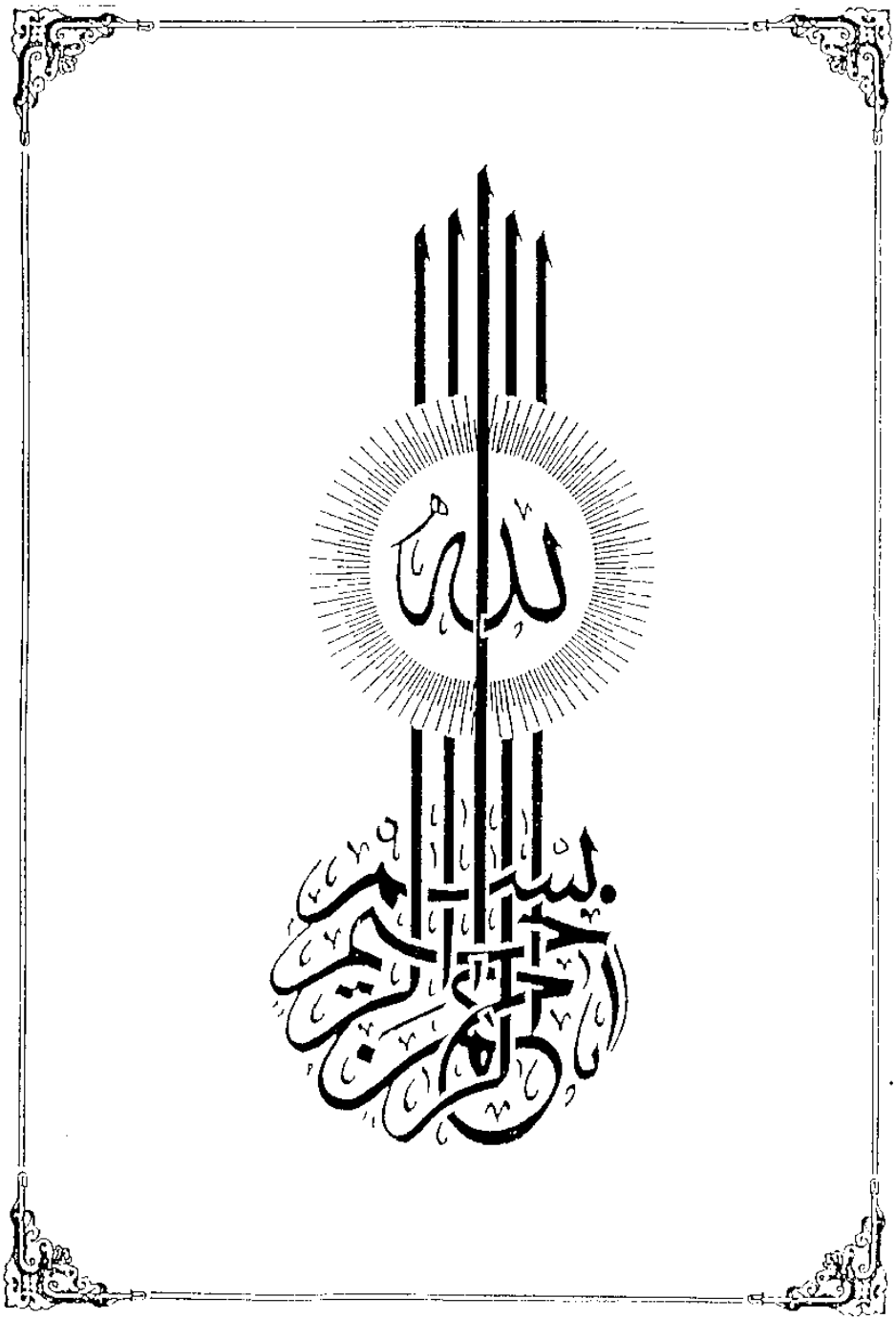

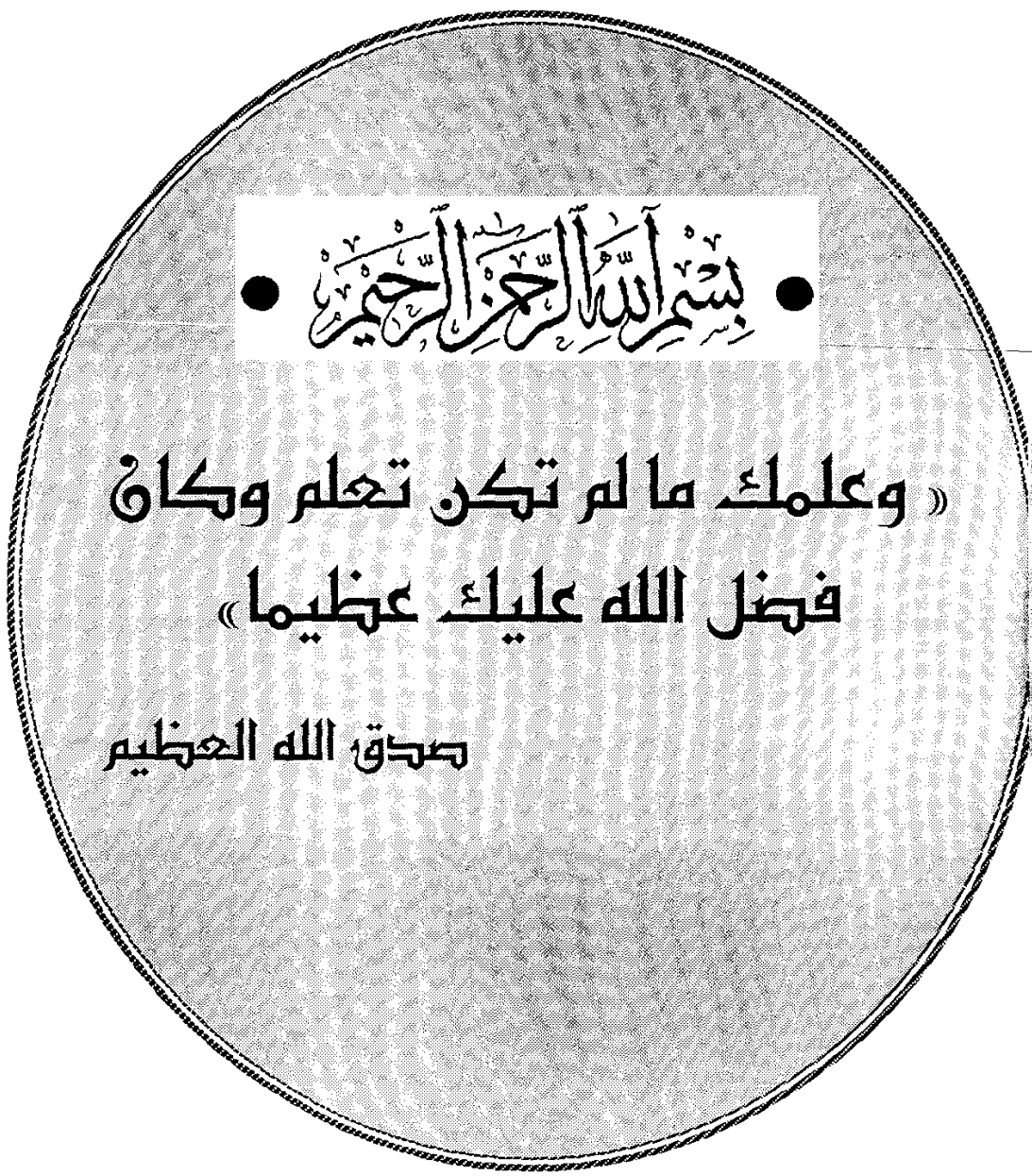

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Introduction & Aim of the work

Introduction

Cleft palate is a common congenital deformity, velopharyngeal valve incompetence (VPI) can be caused by cleft palate. Several cleft types are known, from the overt cleft palate to the occult variety of the milder submucous form. The different types overlap each other and numerous transitional manifestations are known as a continuum of anatomical abnormalities *(Hirschsberg, 1986).*

The VPI in cleft palate patients would lead to multiple functional problems as dental, hearing, psychological as well as communicative disorders (articulation, phonology, language, phonation and resonance) *(Power, 1986).*

A multidimensional protocol is used to provide quantitative and qualitative measures with assessment of the communicative abilities of cleft palate patient in order to understand the problem and assess the development of speech, language and voice of cleft palate patients.

Shprintzen (1995) concluded that management of the cleft palate patients includes family counseling, surgical, prosthodontic, communicative intervention. *Shprintzen* also added that repairing the palate serves only one purpose; to try to provide normal speech production for the patient. It is essentially impossible to produce normal speech with a continuous opening between the mouth and nose. Besides excessive nasality in the individual's speech, normal articulation would be difficult to achieve because of the absence of normal oral landmarks and because the production of normal sounds would not occur even if the correct placement of the articulators was achieved. By leaving the hard palate unrepaired, normal speech would be very difficult

to achieve, even if the cleft was obturated (i.e., coverd). Obturators are rarely "air tight", the fit changes with growth, and an acrylic appliance is a poor substitute for normal oral tissues.

A variety of opinions are held regarding the timing of cleft palate repair. Controverises among surgeons, orthodontists, and phoniatricians are related to the timing of palatoplasty and the influence of this procedure on speech and maxillofacial growth. To understand these controversies, it is helpful to discuss the reasoning behind them. The different clinical objectives of the speicalists involved in cleft palate treatment dictate different timing of palatoplasty for optimal results, and this is the source of conflict involved in the timing of surgical repair*(Bardach and Salyer, 1995).*

While ***Bardach and Salyer (1995)*** reported that the goal of phoniatricians is to obtain normal speech production following cleft palate repair. ***Ysunza et al. (1992)*** concluded that speech therapy is indicated prior to surgery because an increase in the movement of the VP sphincter reduce the degree of nasal obstruction necessary to eliminate VPI, and becuase surgery will be completed with normal articulation, the postoperative results can be appreciated immediately. Moreover, plastic surgeons, although concerned with speech, are primarily concerned with complete closure of the palatal cleft, the creation of an adequately functioning soft palate, and the influence of their surgical technique on the growth of the maxillary complex. Orthodontists are interested in securing undisturbed maxillofacial growth and normal occlusion. At the present time, there is no established protocol for the timing of palate repair that is universally and unconditionally accepted by all three specialties *(Bardach and Salyer, 1995).*