

John B. Mulliken Festschrift

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PROGRAM

FESTSCHRIFT PAPERS IN HONOR OF JOHN B. MULLIKEN, MD

CRANIOFACIAL DISORDERS - Leonard B. Kaban, DMD, MD, Chair

- 8:15-8:30 The 30-Year tale of a P&S 1960 classmate, or, Journey along the path of
craniosynostosis
Joseph G. McCarthy, MD
- 8:30-8:45 The skills of the surgeon, the eye of the artist, the mind of the analyst
Myron Belfer, MD
- 8:45-9:00 Facial asymmetry and the 4th dimension
Leonard B. Kaban, DMD, MD
- 9:00-9:15 Some unusual syndromes with craniosynostosis
M. Michael Cohen Jr, DMD, PhD
- 9:15-9:30 Frontal encephaloceles
Tony Holmes, MD
- 9:30-9:45 Correlation of risk factors with severity of deformational plagiocephaly: Analysis of
over 500 consecutive patients
Albert Oh, MD
- 9:45-10:00 Reconstruction of pediatric cranial base defects: a retrospective review of a
single microsurgeon's 30 year experience
Joseph Upton, MD
- 10:00-10:15 Mechanisms of osteo/chondro-induction by demineralized bone
Julie Glowacki, PhD
- 10:15-10:30 The role of endogenous angiogenesis inhibitors in infantile hemangiomas and
Down syndrome
Carmen Barnes, PhD and Sandra Ryeom, PhD
- 10:30-10:45 Coffee Break

CLEFTS AND PHARYNGEAL ARCH ANOMALIES - Angela Lin, MD, Chair

- 10:45-11:00 The D.P.N.R. (Dynamic presurgical nasal remodeling) technique
Ricardo D. Bennun, MD, PhD
- 11:00-11:15 Anthropometric evaluation of bilateral complete cleft lip and nasal deformity repaired
in the neonatal period
Romain Vanwijck, MD
- 11:15-11:30 Bilateral cleft lip repair
Suk Joon Oh, MD, PhD
- 11:30-11:45 Long term result in bilateral cleft lip repair by Mulliken's method
Seok Kwun Kim, MD, PhD

CLEFTS AND PHARYNGEAL ARCH ANOMALIES

Angela Lin, MD, Chair

Title: The D.P.N.R. (dynamic presurgical nasal remodeling) technique

Presenter: Ricardo D. Bennun, MD, MS, PhD, FACS

Abstract:

Objective:

To present technical modifications to the original presurgical nasal appliance introduced in 1991 by the author.

Method:

The DPNR technique does not rely on the relatively static force exerted by the orthopedic plate held in place by means of tape or adhesives. The principle behind this procedure is the use of the force generated during suction and swallowing to produce the remodeling effects on the nasal structures before unilateral and bilateral cleft repair.

The newly designed appliance consists of two elements: 1- a perfectly adapted conventional acrylic intraoral plate, which is left loose in the mouth to generate a discontinuous but controlled impact during feeding, and 2- a nasal bumper attached to the vestibular flange of the plate formed by three components: a directional component, a dynamic component, and a remodeling component.

Thanks to the new changes incorporated to the nasal extension we can obtain better results, elevating the nasal tip and remodeling the depressed cleft side alar cartilages in unilateral cases; and repositioning and correcting the positional alteration of the nasal cartilages building the new columella, in bilateral cases.

When the DPNR protocol is instituted early, it avoids memory cartilage fixation. Furthermore, the nasal component acts not only on the nasal structures but on lip function by stimulating labial muscle contraction.

Conclusions:

The modifications introduced resulted more effective in ameliorating the initial cleft nasal deformity. In addition, the tolerance and comfort of the patient has been improved, and the modifications needed during follow-up have been simplified, significantly reducing the time required to do adjustments and increasing the interval between appointments.

The obtained result facilitates primary surgical cleft lip and nose reconstruction and improves surgical outcomes in patients with complete unilateral and bilateral cleft lip and palate.