Nimodipine and Acceleration of Functional Recovery of the Facial Nerve After Crush Injury

Facial nerve injury often results in devastating emotional and functional impairment. Commonly, a patient must endure a challenging and protracted recovery period in which further ocular, nutritional, and expressive complications may develop. Robin W. Lindsay, MD, and colleagues present their findings of accelerated facial nerve recovery in the rat animal model with nimodipine administration. Statistically significant improvements in whisking amplitude, velocity, and acceleration were observed in comparison with control animals. These findings demonstrate the first pharmacologic therapy to improve facial nerve recovery in an animal model that is safe for routine clinical use.

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Reconstruction of the Nasal Septum Using Polydioxanone Plate

As the central divide of the nasal cavity, the nasal septum is an integral component in air passage and structural support. Abnormalities in nasal airflow and external nasal appearance are often intimately related to architectural deviations or disruption of this important structure. MirIAM Boenisch, MD, PhD, and Gilbert J. Nolst Trenite, MD, PhD, review their 10-year experience using the polydioxanone plate as a scaffold for septal reconstruction in 396 patients with severe nasal deformities. In their modification of the extracorporeal septoplasty, the authors remodeled and secured the quadrangular cartilage to the resorbable matrix prior to reimplantation. They present their notable functional and cosmetic outcomes as well as variations in their novel operative technique.

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Mandibular Distraction Osteogenesis Used to Treat Upper Airway Obstruction

The facial skeleton is an integral element in the establishment and maintenance of a patent airway. To this end, congenital and syndromic causes of mandibular deficiency often result in oropharyngeal narrowing and a variable degree of upper airway obstruction. Tracheostomy is required in nearly 25% of these patients but not without associated risks. Craig W. Senders, MD, and colleagues investigate mandibular distraction osteogenesis (MDO) as an alternative to tracheostomy tube placement in micrognathic patients with tongue-based obstruction. Multiplanar advancement was performed with the application of an external distractor in newborn patients and those with long-standing tracheostomies. The findings observed reveal the significant impact of MDO in the treatment of upper airway obstruction in select pediatric patients.

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Orbicularis Suspension Flap and Its Effect on Lower Eyelid Position: A Digital Image Analysis

Age-related changes of the lower eyelid tissues often produce redundancy in eyelid skin, pseudoherniation of orbital fat, and a ptotic laxity of the orbicularis oculi muscle. Some individuals also display a hollowing along the inferior orbital rim. It is this subset of patients that represent a complex challenge in periorbital rejuvenation. Christopher I. Zoumalan, MD, and colleagues discuss changes in lower eyelid position as related to performing an orbicularis suspension flap in combination with an inside-out blepharoplasty in this patient population. Digital analysis of 68 patients revealed a statistically significant decrease in postoperative margin reflex distance in addition to a more natural anatomic position of the lower eyelid.

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Hope by Sir Edward Coley Burne-Jones (1833-1898).

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This issue’s Highlights were written by James Ridgway, MD.