## Nasoorbitoethmoid fracture

- Optimizing Endo-DCR Outcomes in Traumatic Nasolacrimal Duct Obstruction
- Simplified Transnasal Canthal Fixation of Naso-orbito-ethmoidal Fractures
- Computed Tomography Dacryocystography Guided Management of Traumatic Secondary Acquired Lacrimal Duct Obstruction: SALDO Update Study (SUP) - Paper V
- Pattern of Ophthalmic Injuries in Patients With Maxillofacial Fractures at a Tertiary Care Centre in Central India
- In- Versus Out-Fracture: A Novel Concept in Naso-Orbito-Ethmoid Injury
- Secondary Reconstruction of Panfacial Fractures With Virtual Reality Surgical Planning Using Both Pre and Postreconstruction Scans
- Facial trauma education in radiology: using surgeon feedback as the benchmark for success
- Evlauation of Fixation Techniques in Naso-orbito-ethmoidal Fractures: A Comparative Study

see Craniofacial fracture.

see also Frontal sinus fracture.

Nasoorbitoethmoid fractures account for ~5% of adult and 15% of pediatric facial fractures. The appropriate management of these injuries requires an understanding of the anatomic features of the region, the classification of injury severity, assessment, and treatment methods. The purpose of this article is to provide a general overview of the topic, with a more specific focus on the pearls of managing these fractures. Prompt and proper management of these injuries can achieve both adequate functional and aesthetic outcomes <sup>1)</sup>.

## **Case series**

A retrospective review of patients under 18 years who presented to our institution from 2006 to 2021 with facial fractures was conducted; patients with NOE fractures were included. Data collected included demographics, mechanism of injury, fracture type, management, and outcomes.

Results: Fifty-eight patients met inclusion criteria; 77.6% presented with Manson-Marcowitz Type I fractures, 17.2% with Type II, and 5.2% with Type III. The most common cause of injury was motor vehicle accidents (MVAs, 39.7%) and sports (31%). Glasgow Coma Scale and injury mechanism were not predictive of injury severity in the pediatric population (P = 0.353, P = 0.493). Orbital fractures were the most common associated fractures (n=55, 94.8%); parietal bone fractures were more likely in Type III fractures (P = 0.047). LeFort III fractures were more likely in type II fractures (P = 0.011). Soft tissue and neurological injuries were the most common associated injuries regardless of NOE fracture type (81% and 58.6%, respectively). There was no significant difference in type of operative

management or in the rates of adverse outcomes between types of NOE fractures.

Conclusions: These findings suggest that pediatric NOE fractures, although rare, present differently from adult NOE fractures and that revisiting predictive heuristics and treatment strategies is warranted in this population <sup>2)</sup>

1)

Nguyen M, Koshy JC, Hollier LH Jr. Pearls of nasoorbitoethmoid trauma management. Semin Plast Surg. 2010 Nov;24(4):383-8. doi: 10.1055/s-0030-1269767. PMID: 22550462; PMCID: PMC3324217.

Glenney AE, Irgebay Z, Cheng LG, Comerci AJ, Mocharnuk JW, Bruce MK, Anstadt EE, Saladino RA, Dvoracek LA, Losee JE, Goldstein JA. Pediatric Nasoorbitoethmoid Fractures: A Single Institution's 15-Year Experience. J Craniofac Surg. 2023 Sep 1;34(6):1717-1721. doi: 10.1097/SCS.000000000009514. Epub 2023 Jul 17. PMID: 37458265.

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