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Analysis of complications following multidisciplinary functional intervention in paediatric craniomaxillofacial deformities

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Abstract

Paediatric craniomaxillofacial (CMF) surgery requires a multidisciplinary team approach to ensure the optimal and holistic management of children with craniofacial deformities. The aim of this retrospective study was to analyse the complications following functional interventions among 34 CMF deformity patients in a single multidisciplinary craniofacial centre. Electronic data including patient demographic characteristics and clinical entry were analysed. Inclusion criteria were all paediatric patients with CMF deformities who underwent various functional interventions. A total of 64 interventions (48 intermediate and 16 definitive) were conducted. Based on the Sharma classification of complications, 20.3% were type I, 4.7% were type II, 1.6% were type III, and 4.7% were type IV. Most complications were type I, which included local infection (3.1%) and premature opening of tarsorrhaphy (3.1%). More serious complications (types III and IV) included temporary visual loss (1.6%) and intraoperative haemorrhage (1.6%). Although a low complication rate was observed in intermediate interventions, a higher complication rate was observed in more complex definitive interventions such as monobloc distraction osteogenesis. Although most complications were manageable, effective prevention remains mandatory, as serious complications may lead to permanent damage and mortality. This analysis highlights the importance of a multidisciplinary team approach to optimize the outcomes in CMF patient management. © 2020 International Association of Oral and Maxillofacial Surgeons

Author keywords

Complications ; Craniofacial deformities; Craniofacial surgery; Craniomaxillofacial; Morbidity

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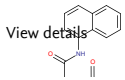
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Child; Craniofacial Abnormalities; Humans; Osteogenesis, Distraction; Retrospective Studies

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adenotonsillectomy; adolescent; Article; brain ventriculitis; child; clinical article; clinical assessment; clinical effectiveness; craniofacial malformation; craniofacial surgery; cranioplasty; distraction osteogenesis; electronic medical record; female; human; infant; male; managed care; medical device complication; meningitis; multidisciplinary team; myringotomy; nasopharynx airway dislodgment; neurosurgery; operative blood loss; patient care; pediatric surgery; pediatrics; postoperative complication; postoperative frontal ridge; postoperative infection; preschool child; retrospective study; screw loosening; surgical infection; temporary bulging; tracheostomy; tympanostomy tube dislodgment; vector misalignment; ventriculoperitoneal shunt malposition; visual impairment; distraction osteogenesis



Topic name

Craniosynostoses; Nonsyndromic Trigonocephaly; Synostosis

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