

The Role of the Otolaryngologist in a Craniofacial Interdisciplinary Team



Luis Seguias*

Pediatric Coordination of Care Program Director, University of Florida, USA

Submission: February 12, 2019; **Published:** February 21, 2019

***Corresponding author:** Luis Seguias, Pediatric Coordination of Care Program Director, University of Florida, Gainesville, Florida, USA

Introduction

The American Cleft-Craniofacial Association (ACPA) and the American Academy of Pediatrics (AAP) strongly support the interdisciplinary team approach as the standard of care for the management in children with craniofacial anomalies^{1,2}. The principal role of the team is to implement a cohesive plan and assure and efficient use of all the resources available. Every Cleft-Craniofacial team per ACPA standard of care should have an otolaryngologist with special training and experience in cleft lip and palate. Interdisciplinary longitudinal evaluation and treatment allows early recognition and prompt intervention optimizing care.

The Role of the Otolaryngologic care is summarized as follow

Comprehensive Examination

A complete nasal and otologic examination are the first step to recognize congenital or acquired anomalies. Anterior and posterior rhinoscopy will clearly identify clefting, nasal septal defects, intranasal masses and choanal atresia. Similarly, a full otoscopic evaluation can reveal middle ear effusion and a non-compliance membrane. Audiologist should conduct behavioral and physiologic assessments. Behavioral testing includes pure tone and, when possible, speech audiometry. Physiologic tests should include acoustic emittance testing (tympanometry and middle ear reflexes) and otoacoustic emissions (OAEs). Airway assessment using fiberoptic endoscopy to detect structural abnormalities (e.g., laryngomalacia, subglottic stenosis, vocal cord paralysis) is now the gold standard. High-speed video nasopharyngoscopy functional observation is becoming conventional for the diagnosis of speech (velopharyngeal insufficiency) and swallowing disorders related to craniofacial anomalies. Airway obstruction is of particular concern in patients with hypoplasia of the midface and mandible, as seen with Crouzon's, Treacher Collins, Apert's and Pierre Robin Sequence [1-5].

Otolaryngologic Management

Oto-Pathology: The great majority of the infants with cleft palate suffer from persistent inner ear effusion due to Eustachian tube dysfunction. Now days most of the centers will perform myringotomy and placement of ventilation during initial their palatoplasty. It is very important that all the children undergoing tympanoplasty must have serial audiologic evaluation that should continue to adulthood if necessary. Clinical data had demonstrated that cleft palate children who received pressure equalizing tubes had better long-term speech and language outcomes³. However, is not uncommon the prescription of amplification devices (hearing aid, bone anchored hearing aids (BAHA), cochlear implants, and auditory training or FM systems) in this sub-population. Aural soft tissue cosmetic reconfiguration can be performed by a well-trained otolaryngologist.

Airway Obstruction: This is the most serious of the otolaryngologic condition involving individuals with craniofacial anomalies. Surgical soft tissue reduction (e.g., adenotonsillectomy, supraglottoplasty) and tracheotomy require deep analysis prior procedure. In the particular cases like micro-retrognathia 3-D Computed-Tomography imaging and polysomnography characterize the severity of the obstruction.

Speech Articulation Impairment: Particularly in cleft population residual hypernasal speech is present after cleft palate repair. The otolaryngologist will determine using nasopharyngoscopy the type of surgical procedure that has the best chance of success.

Final Comment: Managing the care for patients with complex craniofacial conditions entails coordination of multiple subspecialties for a long period of time. The otolaryngologist in the cleft-craniofacial team has critical multifunctional role that encompass otologic therapy, aural anatomical reconstruction, airway management and also performing essential diagnostic procedures for associated speech and swallowing disorders.

References

1. Charlotte W Lewis, Lisa S Jacob, Christoph U Lehmann (2017) The Primary Care Pediatrician and the Care of Children with Cleft Lip and/or Cleft Palate. *Pediatrics*139(5): e1-e14.
2. (2018) Parameters for Evaluation and Treatment of Patients with Cleft Lip/Palate or Other Craniofacial Differences 55(1): 137-156.
3. Kuo CL, Tsao YH, Cheng HM (2014) Grommets for otitis media with effusion in children with cleft palate: a systematic review. *Pediatrics* 134(5): 983-994
4. Richard Holt G, Jane Watson M (1984) The Otolaryngologist's Role in the Craniofacial Anomalies Team. *Otolaryngology-Head and Neck Surgery* 92: 406-409.
5. (2018) Cleft Lip and Palate. *Critical Elements of Care*. (6th edn), Revised. The Washington State Department of Health Children and Youth with Special Health Care Needs Program and Seattle Children's Hospital Craniofacial Center Seattle, Washington, USA.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/GJO.2019.19.556013](https://doi.org/10.19080/GJO.2019.19.556013)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>