The Trend of Cleft Care at a Children’s Referral Center in Thailand

Dhawe Setabutr, M.D.1,2, Thanakrit Sathavornmanee, B.S.S.,3 Polpatt Jitpakdee, B.S.S.,3 Songphon Nudchawong, M.D.,2 Penpak Kргrgmatukorn, M.D.3

1Department of Otolaryngology, Queen Sirikit National Institute of Child Health, Bangkok, Thailand
2Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, Thailand
3Department of Plastic Surgery, Queen Sirikit National Institute of Child Health, Bangkok, Thailand

Introduction

Cleft lip and palate remains one of the most common congenital deformities of the face. In Thailand, orofacial clefts occur in 1 out of every 400 live births, with the highest rates of occurrence in the Northeastern region of Thailand at 745 live births per year.1 Like other developing nations, management of cleft care in Thailand is still primarily focused on correcting cleft lip and palate surgery, especially speech therapy, ultimately making it difficult to set up interdisciplinary care teams, despite the establishment of multiple specialized centers. The American Cleft Palate-Craniofacial Association, a major nonprofit organization with members in over 40 countries, currently lists no organization-approved teams in Thailand, and there are currently only 40 Speech and Language Pathologists (SLP) in the country, with only 10 people working outside of Bangkok.2 As with other countries, there has been no standardization of cleft care, and many patients still receive late treatment, or no treatment at all.

Materials and Methods

A retrospective review of medical records was completed of patients who underwent cleft lip, lip and palate surgery by the senior author (P.K.), a Pediatric Plastic Surgeon, between January 2015 to October 2017 at the Queen Sirikit Institute of Child Health (QSNICH) in Bangkok, Thailand. QSNICH accepts referrals from throughout a nation of roughly 65 million people. Patients aged below eighteen years of age were included in this study. Patient demographics were obtained from the patient’s initial clinical evaluation at our outpatient facility. Additionally, patients were classified into two groups, those traveling greater than 30 kilometers to the hospital and those traveling less than that. Data of all patients included were part of the paper medical record. If patients had undergone various procedures of hearing assessment, this information was also included in the analysis.

Means and standard deviations were computed for the summary measures. Student t-test was used for continuous variables. Statistical significance was set at p < 0.05. Data was analyzed using the Statistical Package for the Social Sciences software package v. 23 (IBM®, Chicago, IL, USA).

Results

A total of 102 patient charts were reviewed. There were 30 (29.4%) children who had a cleft lip (CL) alone; while 27 (26.4%) had a cleft palate alone. Forty-five patients had both cleft lip and palate. There was an equal distribution of male and female patients (52.9% male, 47.1% female). Left sided unilateral clefts were the most common cleft lip diagnosis, comprising 62.3% of patients.

Figure 1: Patient demographics undergoing cleft care

Discussion

Our cleft patients had palatal surgery delayed when compared to the recommended time frame. Delays in care included delayed initial evaluation, most of which were foreign nationals or those with refugee status, and patients who subsequently were lost to follow up. Many patients in developed nations spend over an hour for travel time alone to their medical appointments, and we anticipate our patients spend longer.4 However, distance surprisingly had no significant impact on patients timing of cleft care in our patient population. The number of myringotomy tubes placed in Thailand is far less than that done in the United States.5 With regards to hearing assessment, resource limitation is the primary suspected cause. Most patients will have undergone TEOAE, but to formal hearing examination is far higher when compared to more developed systems. Twenty-four percent of our patients had undergone an ABR, following failed screening. Nine patient’s ABRs revealed hearing loss.

Conclusion

Our study found that patients who underwent treatment at Queen Sirikit Institute of Children’s Health had relatively comparable timelines when compared to centers in more developed nations. Two relative delays in care were found in primary surgery and formal hearing assessment. Such knowledge is valuable to improve the overall care distributed to this unique subset of patients in the developing world. Distance made no significant impact on patient’s timing of care despite prior suspicions. Future research is needed to further assess progress made over the next ten years.

References