

Giriş

En sık görülen doğumsal yüz anomalisi olan yarık dudak - damak hastalarında özellikle maksilla gelişim bozukluğunun baskın olduğu orta yüz bölgesinin gelişimi ile ilgili problemler sık olarak gözlenmektedir. Tek taraflı yarık dudak - damak hastalarında yarık tarafı küçük segment gelişimi yetersiz olup superior, posterior ve mediale doğru yer değiştirir, bilateral yarık - dudak damak hastalarında posterior alveoler segment daha büyük açılarla mediale kollabre olabilir ve bu durum aşırı dar maksilla ve posterior çapraz kapanışlara yol açar. Premaksilla superiora veya inferiora doğru çıkışlı olabilir ya da palatal segmente doğru deplase olabilir (1-3). Mandibula gelişimi normal olsa da sıklıkla ön açık kapanış, posterior yüz yüksekliğinde azalma ve anterior yüz yüksekliğinde artış ile prognatik bir yüz görünümü izlenir.

Ortognatik cerrahi ihtiyacı ve yaklaşımı yarık tipinin yanı sıra, tedavi merkezi ve cerraha göre de farklılıklar gösterebilir. Literatüre göre yarık hastaları % 14 ile % 75 oranında ortognatik cerrahiye ihtiyaç duyarlar (1-6). Yarık tipine göre ortognatik cerrahi oranlarına baktığımızda ise tek taraflı yarık hastalarında % 25, bazı kayınlarda % 48.3 oranında ortognatik cerrahi oranı bildirilmiştir, bilateral yarıklarda ortognatik cerrahi uygulanma oranı %65 oranında bildirilmiştir. İzole yarık damak olgularında cerrahi ihtiyacı görece daha düşük orandadır ve %12,5 oranında bildirilmiştir (4).

Ortognatik cerrahi ihtiyacının yanında yarık dudak - damak hastalarına, operasyon skarları, lateral kesici dişlerin gelişim bozukluğu, alveolar defekt, anormal nazal anatomi ve üst dudak anormal kas fonksiyonu gibi multipl problemler de eşlik eder (7).

Velofaringeal Yetmezlik

Operasyon öncesi hipernazal konuşması olan hastalar operasyon sonrası hipernazal konuşmaya devam ederler. Pre-op normal konuşma yetisine sahip yarık hastalarının %12.5 kadarı post-op velofaringeal yetmezlikle karşılaşırlar (37). Pre-operatif hipernazalite ve sınırlı yetmezlik postop fonksiyon bozukluğu için risk oluşturmaktadır (38) ve tedavi planlamasında göz önünde bulundurulmalıdır.

Anahtar Kelimeler: Lefort 1 osteotomi, ortognatik cerrahi, yarık dudak, yarık damak

Kaynakça

1. Good PM, Mulliken JB, Padwa BL. Frequency of Le Fort I osteotomy after repaired cleft lip and palate or cleft palate. *Cleft Palate Craniofac J* 2007;44(4): 396–401.
2. Aburezq H, Daskalogiannakis J, Forrest C. Management of the prominent premaxilla in bilateral cleft lip and palate. *Cleft Palate Craniofac J* 2006;43(1): 92–95.
3. Geraedts CT, Borstlap WA, Groenewoud JM, et al. Long-term evaluation of bilateral cleft lip and palate patients after early secondary closure and premaxilla repositioning. *Int J Oral Maxillofac Surg* 2007; 36(9):788–796.
4. Daskalogiannakis J, Mehta M. The need for orthognathic surgery in patients with repaired complete unilateral and complete bilateral cleft lip and palate. *Cleft Palate Craniofac J* 2009;46(5):498–502.
5. Ross RB. Treatment variables affecting facial growth in complete unilateral cleft lip and palate. *Cleft Palate J* 1987;24(1):5–77.
6. DeLuke DM, Marchand A, Robles EC, et al. Facial growth and the need for orthognathic surgery after cleft palate repair: literature review and report of 28 cases. *J Oral Maxillofac Surg* 1997;55(7):694–697 [discussion: 697–698].
7. Posnick JC, Tompson B. Modification of the maxillary Le Fort I osteotomy in cleft-orthognathic surgery: the bilateral cleft lip and palate deformity. *J. Oral Maxillofac Surg* 1993;51(1):2–11.
8. Bell WH, Jacobs JD. Surgical-orthodontic correction of maxillary retrusion by Le Fort I osteotomy and proplast. *J Maxillofac Surg* 1980;8(2):84–94.
9. Persson G, Helle S, Nord PG. Bone-plates for stabilizing Le Fort I osteotomies. *J Maxillofac Surg* 1986;14(2):69–73.
10. Phillips JH, Nish I, Daskalogiannakis J. Orthognathic surgery in cleft patients. *Plast Reconstr Surg* 2012; 129(3):535e–548e.
11. Kumar A, Gabbay JS, Nikjoo R, et al. Improved outcomes in cleft patients with severe maxillary deficiency after Le Fort I internal distraction. *Plast Reconstr Surg* 2006;117(5):1499–509.
12. Cassolato SF, Ross B, Daskalogiannakis J, et al. Treatment of dental anomalies in children with complete unilateral cleft lip and palate at SickKids hospital, Toronto. *Cleft Palate Craniofac J* 2009;46(2):166–172.
13. Smith KS. (2012). Cleft orthognathic surgery. In: Milaro M, Larsen P, Waite P, editors. Peterson's principals of oral and maxillofacial surgery volume 2. 3rd edition.; 2011. p. 1455–1465. Shelton (CT), USA, People's Medical Publishing House
14. Levy-Bercowski D, DeLeon E Jr, Stockstill JW, et al. Orthognathic cleft-surgical/orthodontic treatment. *Semin Orthod* 2011;17(3):197–206.

15. Posnick JC, Ricalde P. Cleft-orthognathic surgery. Clin Plast Surg 2004;31(2):315–330.
16. James JN, Costello BJ, Ruiz RL Management of cleft lip and palate and cleft orthognathic considerations.Oral Maxillofac Surg Clin North Am. 2014 Nov;26(4):565-572. doi: 10.1016/j.coms.2014.08.007. Epub 2014 Oct 23. Review.
17. Brattstrom V, McWilliam J, Larson O et.al. Craniofacial development in children with unilateral clefts of the lip, alveolus and palate treated according to four different regimes: I. Maxillary development. Scand J Plast Reconstr Surg Hand Surg. 1991;25:259–267.
18. Tomanova M, Mullerova Z. Effects of primary bone grafting on facial development in patients with unilateral complete cleft lip and palate. Acta Chir Plast. 1994;36:38–41.
19. Hathaway R, Daskalogiannakis J, Mercado A, et al. The Americleft Study: An inter-center study of treatment outcomes for patients with unilateral cleft lip and palate part 2. Dental arch relationships. Cleft Palate Craniofac J. 2011;48: 244–251.
20. Semb G. Effect of alveolar bone grafting on maxillary growth in unilateral cleft lip and palate patients. Cleft Palate J. 1988; 25:288–295.
21. Daskalogiannakis J, Ross RB. Effect of alveolar bone grafting in the mixed dentition on maxillary growth in complete unilateral cleft lip and palate patients.CleftPalateCraniofacJ. 1997;34:455–458.
22. Leshem D, Tompson B, Phillips JH. Segmental LeFort I surgery: turning a predicted soft-tissue failure into a success. Plast Reconstr Surg 2006;118(5):1213-1216.
23. Jack Y, Glover A, Levy-Bercowski D.(2008). Cleft-orthognathic surgery. Philadelphia: S. Elsevier; p.563–575.
24. Watts GD, Antonarakis GS, Forrest CR, et al. Single versus segmental maxillary osteotomies and longterm stability in unilateral cleft lip and palate related malocclusion. J Oral Maxillofac Surg 2014;72(12): 2514–2521.
25. Menezes R, Vieira AR. Dental anomalies as part of the cleft spectrum. Cleft Palate Craniofac J 2008; 45(4):414–419
26. Carstens MH. Correction of the bilateral cleft using the sliding sulcus technique. J Craniofac Surg. 2000;11:137–167.
27. Cheung LK, Chua HD, Hagg MB. Cleft maxillary distraction versus orthognathic surgery: Clinical morbidities and surgicalrelapse.PlastReconstrSurg.2006;118:996–1008; discussion 1009.
28. Figueroa AA, Polley JW, Friede H, et al. Long-term skeletal stability after maxillary advancement with distraction osteogenesis using a rigid external distraction device in cleft maxillary deformities. Plast Reconstr Surg. 2004;114:1382–1392; discussion 1393–1394.
29. Heliovaara A, Ranta R, Hukki J, et al. Skeletal stability of Le Fort I osteotomy in patients with isolated cleft palate and bilateral cleft lip and palate. Int J Oral Maxillofac Surg 2002;31(4):358–363.
30. Miloro P. (2004) Peterson's principles of oral and maxillofacial surgery. London: BC Decker
31. Welch TB. Stability in the correction of dentofacial deformities: a comprehensive review. J Oral Maxillofac Surg 1989;47(11):1142–1149.
32. Doucet JC, Herlin C, Bigorre M, et al. Effects of growth on maxillary distraction osteogenesis in cleft lip and palate. J Craniomaxillofac Surg 2013;41(8): 836–841.
33. Cheung LK, Chua HD. A meta-analysis of cleft maxillary osteotomy and distraction osteogenesis.Int J Oral Maxillofac Surg 2006;35(1):14–24.

34. West R. Orthognathic surgery, an adjunct for correcting secondary cleft deformities. *Oral Maxillofac Surg Clin North Am* 1991;3:641–669.
35. Posnick JC, Dagys AP. Skeletal stability and relapse patterns after Le Fort I maxillary osteotomy fixed with miniplates: the unilateral cleft lip and palate deformity. *Plast Reconstr Surg* 1994;94(7):924–932.
36. Hochban W, Ganss C, Austermann KH. Long-term results after maxillary advancement in patients with clefts. *Cleft Palate Craniofac J* 1993;30(2):237–243.
37. Phillips JH, Klaiman P, Delorey R, et al. Predictors of velopharyngeal insufficiency in cleft palate orthognathic surgery. *Plast Reconstr Surg* 2005;115(3):681–686.
38. Janulewicz J, Costello BJ, Buckley MJ, et al. The effects of Le Fort I osteotomies on velopharyngeal and speech functions in cleft patients. *J Oral Maxillofac Surg* 2004;62(3):308–314.