

Swallowing dysfunction and removable functional appliances

Eur J Transl Myol 29 (3): 246-250, 2019

- craniocervical posture and hyoid bone position. *Am J Orthod Dentofacial Orthop* 2015;147:72-9.
7. Tecco S, Tete S, D'Attilio M, et al. Surface electromyographic patterns of masticatory, neck, and trunk muscles in temporomandibular joint dysfunction patients undergoing anterior repositioning splint therapy. *Eur J Orthod* 2008;30:592-7.
 8. Lee JH. Effects of forward head posture on static and dynamic balance control. *J Phys Ther Sci* 2016;28:274-7.
 9. Cuccia A, Caradonna C. The relationship between the stomatognathic system and body posture. *Clinics (Sao Paulo)* 2009;64:61-6.
 10. López-Soto LM, López-Soto OP, Osorio-Forero A, Restrepo F, Tamayo-Orrego L. Muscle Activity and Muscle Strength in Atypical Swallowing. *Salud Uninorte* 2017;33:273-84.
 11. Kim BR, Sung IY, Choi KH, et al. Long-term outcomes in children with swallowing dysfunction. *Dev Neurorehabil* 2014;17:298-305.
 12. Saccomanno S, Di Tullio A, D'Alatri L, et al. Proposal for a myofunctional therapy protocol in case of altered lingual frenulum. A pilot study. *Eur J Paediatr Dent* 2019;20:67-72.
 13. Pancherz H. Activity of the temporal and masseter muscles in class II, division 1 malocclusions. An electromyographic investigation. *Am J Orthod* 1980;77:679-88.
 14. Wozniak K, Piatkowska D, Lipski M, et al. Surface electromyography in orthodontics - a literature review. *Med Sci Monit* 2013;19:416-23.
 15. Sumonsiri P, Thongudomporn U. Surface Electromyographic Studies on Masticatory Muscle Activity Related to Orthodontics: A Review of Literature. *J Dent Assoc Thai* 2017;67(2):107-18.
 16. Kiliaridis S. Masticatory muscle influence on craniofacial growth. *Acta Odontol Scand* 1995;53:196-202.
 17. Van Dyck C, Dekeyser A, Vantricht E, et al. The effect of orofacial myofunctional treatment in children with anterior open bite and tongue dysfunction: a pilot study. *Eur J Orthod* 2016;38:227-34.
 18. Horn H, Kuhnast K, Axmann-Krcmar D, et al. Influence of orofacial dysfunctions on spatial and temporal dimensions of swallowing movements. *J Orofac Orthop* 2004;65:376-88.
 19. DiBiase AT, Cobourne MT, Lee RT. The use of functional appliances in contemporary orthodontic practice. *Br Dent J* 2015;218:123-8.
 20. Yamin-Lacouture C, Woodside DG, Sectakof PA, et al. The action of three types of functional appliances on the activity of the masticatory muscles. *Am J Orthod Dentofacial Orthop* 1997;112:560-72.
 21. Miralles R, Berger B, Bull R, et al. Influence of the activator on electromyographic activity of mandibular elevator muscles. *Am J Orthod Dentofacial Orthop* 1988;94:97-103.
 22. Wozniak K, Piatkowska D, Szyszka-Sommerfeld L, et al. Impact of functional appliances on muscle activity: a surface electromyography study in children. *Med Sci Monit* 2015;21:246-53.
 23. Angle EH. Classification of Malocclusion. *The Dental Cosmos* 1899;41:248-64.
 24. Hanson ML. Orofacial myofunctional disorders: guidelines for assessment and treatment. *Int J Orofacial Myology* 1988;14:27-32.
 25. Garliner D. Myofunctional therapy. *Gen Dent* 1976;24:30-40.
 26. Battaglia G, Messina G, Giustino V, et al. Influence of Vertical Dimension of Occlusion on Peak Force During Handgrip Tests in Athletes. *Asian J Sports Med* 2018;9:e68274.
 27. Maurer C, Heller S, Sure JJ, et al. Strength improvements through occlusal splints? The effects of different lower jaw positions on maximal isometric force production and performance in different jumping types. *PLoS One* 2018;13:e0193540.
 28. McNamara JA, Jr. Neuromuscular and skeletal adaptations to altered function in the orofacial region. *Am J Orthod* 1973;64:578-606.
 29. Carels C, van Steenberghe D. Changes in neuromuscular reflexes in the masseter muscles during functional jaw orthopedic treatment in children. *Am J Orthod Dentofacial Orthop* 1986;90:410-9.
 30. Di Palma E, Tepedino M, Chimenti C, et al. Effects of the functional orthopaedic therapy on masticatory muscles activity. *J Clin Exp Dent* 2017;9:e886-e91.
 31. Saccucci M, Tecco S, Ierardo G, et al. Effects of interceptive orthodontics on orbicular muscle activity: a surface electromyographic study in children. *J Electromyogr Kinesiol* 2011;21:665-71.
 32. Suvinen TI, Malmberg J, Forster C, et al. Postural and dynamic masseter and anterior temporalis muscle EMG repeatability in serial assessments. *J Oral Rehabil* 2009;36:814-20.
 33. de Felicio CM, Melchior Mde O, Ferreira CL, et al. Otologic symptoms of temporomandibular disorder and effect of orofacial myofunctional therapy. *Cranio* 2008;26:118-25.
 34. Homem MA, Vieira-Andrade RG, Falci SG, et al. Effectiveness of orofacial myofunctional therapy in orthodontic patients: a systematic review. *Dental Press J Orthod* 2014;19:94-9.

Submission: May, 7, 2019

Revision received: June 3, 2019

Acceptance: June 5, 2019