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Maxillary first molar extraction in Class II malocclusion

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Running a PhD project is a challenging ‘journey through science’ that requires hard work, limitless amounts of personal time, and commitment to the research goals. However, research is not being conducted outside the real world. Everyday life events may interfere with the research activities, and potentially affect the PhD progress. But working on a PhD is also about learning, making friends, realizing ideas, exploring yourself and taking fate into your own hands. During this ‘journey’, I had the opportunity to meet and work together with esteemed academics from different institutions and countries, who kindly shared their knowledge and enthusiasm to make these studies happen. This part is dedicated to all the friends and colleagues I came across during these years who positively influenced my efforts.

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CURRICULUM VITAE

Christos Livas graduated from the Faculty of Dentistry, Aristotle University - Military School of Officers Corps, Thessaloniki, Greece in 1998. Besides serving in the Greek Armed Forces as dental officer and before his orthodontic training, he practiced general dentistry in his own practice in Athens, Greece. He obtained his specialty certificate from the Department of Orthodontics and Craniofacial Biology, Radboud University Medical Center, Nijmegen, The Netherlands in 2007. For the coming 5 years, he was assigned as Associate Director in the Department of Orthodontics, 251 Hellenic Air Force VA General Hospital in Athens. In 2012, he received his doctoral degree from the Department of Orthodontics and Dentofacial Orthopedics, University of Bern, Bern, Switzerland. Since December 2012, he has joined the Department of Orthodontics, University Medical Center Groningen as full-time staff member.

LIST OF PUBLICATIONS

Verhoef WA, **Livas C**, Delli K, Ren Y. Assessing the standards of online oral hygiene instructions for patients with fixed orthodontic appliances. *J Am Dent Assoc.* 2015 May;146(5):310-7.

Livas C, Pandis N, Booij JW, Halazonetis DJ, Katsaros C, Ren Y. Influence of unilateral maxillary first molar extraction treatment on second and third molar inclination in Class II subdivision subjects. *Angle Orthod.* 2015 Mar 12. [Epub ahead of print]

Livas C, Kouskoura T, Ren Y, Katsaros C, Pandis N. Are claims made in orthodontic journal advertisements evidence-supported? *Angle Orthod.* 2015 Mar;85(2):184-8.

Livas C, Pandis N, Booij JW, Katsaros C, Ren Y. Long-term evaluation of Class II subdivision treatment with unilateral maxillary first molar extraction. *Angle Orthod.* 2014 Nov 11. [Epub ahead of print]

Livas C, Pandis N, Ren Y. Time relevance, citation of reporting guidelines, and breadth of literature search in systematic reviews in orthodontics. *Eur J Orthod.* 2015 Apr;37(2):183-7.

Livas C, Pandis N, Ren Y. Full-text publication of abstracts presented at European Orthodontic Society congresses. *Eur J Orthod.* 2014 Oct;36(5):569-75.

Delli K, **Livas C**, Spijkervet FKL, Vissink A. Internet information on xerostomia: what should patients expect? *Oral Dis.* 2015 Jan;21(1):83-9.

Livas C, Jongsma AC, Ren Y. Enamel reduction techniques in orthodontics: a literature review. *Open Dent J.* 2013 Oct 31;7:146-51.

Delli K, Reichart PA, Bornstein MM, **Livas C**. Management of children with autism spectrum disorder in the dental setting: concerns, behavioural approaches and recommendations. *Med Oral Patol Oral Cir Bucal.* 2013 Nov 1;18(6):e862-8.

Livas C. The Hybrid Aesthetic Functional (HAF) Appliance: A Less Visible Proposal for Functional Orthodontics. *Case Rep Dent.* 2013;2013:298671.

Delli K, **Livas C**, Bornstein MM. Lateral incisor agenesis, canine impaction and characteristics of supernumerary teeth in a South European male population. *Eur J Dent.* 2013 Jul-Sep;7(3):278-83.

Livas C, Delli K. Subjective and objective orthodontic treatment need perception. A systematic review. *Eur J Orthod.* 2013 Jun;35(3):347-53.

Livas C, Delli K, Ren Y. Quality evaluation of the available Internet information regarding pain during orthodontic treatment. *Angle Orthod.* 2013 May;83(3):500-6.

Livas C, Halazonetis DJ, Booij JW, Pandis N, Yu-Kang TU, Katsaros C. Maxillary sinus floor extension and posterior tooth inclination in adolescent patients with Class II Division 1 malocclusion treated with maxillary first molar extraction. *Am J Orthod Dentofacial Orthop.* 2013 Apr;143(4):479-85.

Delli K, **Livas C**, Sculean A, Katsaros C, Bornstein MM. Facts and myths regarding the maxillary midline frenum and its treatment. A systematic review of the literature. *Quintessence Int.* 2013 Feb;44(2):177-8.

Livas C, Delli K, Karapsias S, Pandis N, Ren Y. Investigation of bacteremia induced by removal of orthodontic mini-implants. 2014 Feb;36(1):16-21.

Katsaros C, **Livas C**, Renkema AM. Unerwartete Komplikationen mit lingualem Kleberretainern im Unterkiefer. *Informationen aus Orthodontie & Kieferorthopädie* 2013;45(1):18-21.

Livas C. Mini-implant anchorage in a unilateral Class II patient. *J Clin Orthod.* 2012 May;46(5):293-8.

Livas C, Halazonetis DJ, Booij JW, Katsaros C. Extraction of maxillary first molars improves second and third molar inclinations in Class II Division 1 malocclusion. *Am J Orthod Dentofacial Orthop.* 2011 Sep;140(3):377-82.

Livas C, Kuijpers-Jagtman AM, Bronkhorst E, Derks A, Katsaros C. Quantification of white spot lesions around orthodontic brackets with image analysis. *Angle Orthod.* 2008 Jul;78(4):585-90.

Katsaros C, **Livas C**, Renkema AM. Unexpected complications of bonded mandibular lingual retainers. *Am J Orthod Dentofacial Orthop.* 2007 Dec;132(6):838-41.

Livas C, Renkema AM, Kiliaridis S, Katsaros C. [Bone anchorage in orthodontics. A review]. *Ned Tijdschr Tandheelkd.* 2006 Mar;113(3):96-100.