

E- ISSN: 2148-9505

TURKISH JOURNAL OF ORTHODONTICS

TJO



The Official Journal of Turkish Orthodontic Society

 **galenos**
Publishing House

Volume
Issue
June

37
02
2024



The Official Journal of Turkish Orthodontic Society

TURKISH JOURNAL OF ORTHODONTICS

TJO

Owner

Derya Germeç Çakan

Department of Orthodontics, Yeditepe University
School of Dentistry, İstanbul, Turkey

Editor in Chief

Çağla Şar

Department of Orthodontics, İstanbul
Health and Technology University
School of Dentistry, İstanbul, Turkey
ORCID ID: 0000-0003-4966-9779

Associate Editors

Furkan Dindaroğlu

Department of Orthodontics,
Ege University School of Dentistry, İzmir, Turkey
ORCID ID: 0000-0003-4456-3115

Feyza Eraydın

Department of Orthodontics, Kent University
School of Dentistry, İstanbul, Turkey
ORCID ID: 0000-0002-7791-6979

Seden Akan Bayhan

Department of Orthodontics, Yeditepe University
School of Dentistry, İstanbul, Turkey
ORCID ID: 0000-0001-7955-3086

Editorial Board

Alpdoğan Kantarcı

Department of Periodontology, The Forsyth Institute, Boston, MA, USA

Ayça Arman Özçirpıcı

Department of Orthodontics, Başkent University, Ankara, Turkey

Björn Ludwig

Department of Orthodontics, University of Saarland, Homburg/Saar, Germany

Calogero Dolce

Department of Orthodontics, University of Florida, Florida, USA

Ludovica Nucci

Multidisciplinary Department of Medical-Surgical and Dental Specialties, University of Campania "Luigi Vanvitelli", Via Luigi de Crecchio 6, 80138 Naples, Italy

Flavio Uribe

Department of Orthodontics, University of Connecticut School of Dental Medicine, Farmington, CT, USA

Guisepppe Scuzzo

Department of Orthodontics, University of Ferrara, Ferrara, Italy

Jeffrey P. Okeson

Division of Orofacial Pain, University of Kentucky, Lexington, USA

Lorenzo Franchi

Department of Orthodontics, University of Firenze, Firenze, Italy

Luc Dermout

Department of Orthodontics, University of Ghent, Ghent, Belgium

Martin Palomo

Department of Orthodontics, Case Western Reserve University, Cleveland, Ohio, USA

Mehmet Ali Darendeliler

Department of Orthodontics, University of Sydney, Sydney, Australia

Metin Orhan

Department of Orthodontics, Ankara Yıldırım Beyazıt University, Ankara, Turkey

Moschos A.Papadopoulos

Department of Orthodontics, Aristotle University, Thessaloniki, Greece

Neslihan Üçüncü

Department of Orthodontics, Gazi University, Ankara, Turkey

Ömür Polat Özsoy

Department of Orthodontics, Baskent University, Ankara, Turkey

Pertti Pirttiniemi

Department of Orthodontics, University of Oulu, Oulu, Finland

Ravindra Nanda

Department of Orthodontics, University of Connecticut, Farmington, USA



Publisher Contact

Address: Molla Gürani Mah. Kaçamak Sk. No: 21/1
34093 İstanbul, Turkey
Phone: +90 (530) 177 30 97
E-mail: info@galenos.com.tr/yayin@galenos.com.tr
Web: www.galenos.com.tr
Publisher Certificate Number: 14521

Printing Date: June 2024

E-ISSN: 2148-9505

International scientific journal published quarterly.



The Official Journal of Turkish Orthodontic Society

TURKISH JOURNAL OF ORTHODONTICS

TJO

Editorial Board

Seher Gündüz Arslan

Department of Orthodontics, Dicle University, Diyarbakır, Turkey

Selma Elekdağ Türk

Department of Orthodontics, Ondokuz Mayıs University, Samsun, Turkey

Sema Yüksel

Department of Orthodontics, Gazi University, Ankara, Turkey

Tülin Taner

Department of Orthodontics, Hacettepe University, Ankara, Turkey

Ufuk Toygar Memikoğlu

Department of Orthodontics, Ankara University, Ankara, Turkey

Melih Motro

Department of Orthodontics and Dentofacial Orthopedics, Boston University, Boston, USA

Timur Köse

Department of Biostatistics and Medical Informatics, Ege University, İzmir, Turkey

Please refer to the journal's webpage (<https://turkjorthod.org/>) for "Ethical Policy", "Instructions to Authors" and "About Us".

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the ICMJE, WAME, CSE, COPE, EASE, and NISO. Turkish Journal of Orthodontics is indexed in PubMed Central, Web of Science-Emerging Sources Citation Index, DOAJ, Scopus, CNKI, Gale, EBSCO and TUBITAK ULAKBİM TR Index.

The journal is published online.

Owner: Derya Germeç Çakan on behalf of the Turkish Orthodontic Society

Responsible Manager: Çağla Şar

Editor in Chief: Çağla Şar

Address: Sütüce Mah. İmrahor Cad. No: 82 Beyoğlu, İstanbul/Turkey

Phone: +90 (212) 416 61 13

E-mail: info@turkjorthod.org



The Official Journal of Turkish Orthodontic Society

TURKISH JOURNAL OF ORTHODONTICS

TJO

Original Articles

- 72 **Relationship Between Circummaxillary and Intramaxillary Suture Densities and Skeletal Effects of Rapid Maxillary Expansion**
Ece Başal, Yasemin Bahar Acar
- 79 **Inter-examiner Reliability of Two Methods for Scoring Post-Orthodontic White Spot Lesions from Digital Photographs**
Aikaterini Papadimitriou, Diana Mortensen, Iosif Sifakakis, Olympia Salamara, Svante Twetman, Sotiria Gizani
- 84 **Effects of Mask Usage During the COVID-19 Pandemic on Sign and Symptoms of Temporomandibular Joint Disorder: A Survey Study**
Ezgi Sunal Aktürk, İlke Aydın, Elif Dilara Şeker
- 91 **Investigation of the Mechanical Properties of Thermoplastic Materials Influenced by Different Chemicals**
Sohrab Asefi, Marzieh Nejatifard, Samaneh Kayyal, Sima Shahabi
- 98 **Investigation of Different Miniscrew Head Designs by Finite Element Analysis**
Samet Çıklaçandır, Gökçenur Gökçe Kara, Yalçın İşler
- 104 **Assessment of Bone Thickness at the Infra Zygomatic Crest Region for Various Orthodontic Miniscrew Implant (OMSI) Insertion Angles: A Cone-Beam Computed Tomographic Study**
Jitendra Sharan, Atul Bajoria, Ashok Kumar Jena, Pallawi Sinha, Arunachalam Shivakumar, Vineet Kumar Kamal, Anand Marya
- 112 **Assessment of Changes in Behavior and Quality of Life after Monobloc Treatment in Children with Obstructive Sleep Apnea or Primary Snoring**
Eser Çapan, Hülya Kılıçoğlu, Hande Uzunçibuk
- 122 **Effect of Aligning Forces by Two Preadjusted Edgewise Techniques on a Buccally Positioned Maxillary Canine at Varying Vertical Displacements: A Finite Element Study**
Steve Mathew, Puneet Batra, Nitin Arora, Ashish Kumar Singh, Sridhar Kannan, Aditya Talwar

Review

- 130 **Clear Aligner Therapy Concerns: Addressing Discrepancies Between Digitally Anticipated Outcomes and Clinical Ground Realities**
Yashodhan M. Bichu, Tony Weir, Bingshuang Zou, Samar Adel, Nikhilesh R. Vaid