



AOTT

ACTA ORTHOPAEDICA et TRAUMATOLOGICA TURCICA

Acta Orthop Traumatol Turc
ISSN 1017-995X • EISSN 2589-1294

The Official Journal of
The Turkish Association of Orthopaedics and Traumatology (TOTDER)
and
The Turkish Society of Orthopaedics and Traumatology (TOTBİD)

**Executive Board of Turkish Association of
Orthopaedics and Traumatology**

Önder Aydınöz (*President*)
Yusuf Öztürkmen (*Former President*)
Mustafa Gökhan Bilgili
Ali Şeker
Yavuz Sağlam
Turgut Akgül
Sefa Giray Batıbay
Süleyman Semih Dedeoğlu
Adnan Kara
Mehmet Ali Talmaç

**Executive Committee of the Turkish Society of
Orthopaedics and Traumatology**

Cem Nuri Aktekin (*President*)
Halit Pınar (*Former President*)
Ahmet Murat Bülbül
Ali Öçgüder
Ahmet Özgür Yıldırım
Kerem Başarır
Kubilay Beng
Mehmet Demirhan
Serkan İltar
Halil Yalçın Yüksel

Owner on behalf of the Turkish Association of Orthopaedics and Traumatology:
Önder Aydınöz • Publication Type: Bimonthly periodical • Publication date: December 29, 2023
• Published by the Turkish Association of Orthopaedics and Traumatology





AOTT

ACTA ORTHOPAEDICA et TRAUMATOLOGICA TURCICA

The Official Journal of the Turkish Association of Orthopaedics and Traumatology (TOTDER) and the Turkish Society of Orthopaedics and Traumatology (TOTBID)



Founder
İbrahim Kara

General Manager
Ali Şahin

Finance Coordinator
Sinem Fehime İlhan

Journal Managers
Deniz Kaya
İrmak Berberoğlu
Arzu Arı

Publications Coordinators
Alara Ergin
İrem Özmen
Derya Azer
Beril Tekay
Nisanur Atıcı
Şeref Mert Gücün
Simge Akkaş

Web Specialists
Erdem Ercivan
Doğan Oruç

Project Assistant
Batuhan Kara

Contact Address:
Büyükdere Cad. 199/6, 34394,
Şişli, İstanbul, Turkey
Phone: +90 212 217 17 00
Fax: +90 212 217 22 92
E-mail: info@avesyayincilik.com

Editor-in-Chief

Haluk Berk
Dokuz Eylül University, School of
Medicine, İzmir Turkey
editor@aott.org.tr

Former Editor-in-Chief

Önder Kılıçoğlu
İstanbul University, İstanbul School of
Medicine, İstanbul, Turkey
kilocglu@aott.org.tr

Technical Editors

Emre Acar
Dokuz Eylül University, School of
Medicine, İzmir, Turkey

Onur Başçı
Dokuz Eylül University, School of
Medicine, İzmir, Turkey

Mehmet Demirel
İstanbul University, İstanbul Faculty of
Medicine, İstanbul, Turkey

Murat Korkmaz
Koç University Hospital, İstanbul, Turkey

Emre Anıl Özbek
Ankara University, School of Medicine,
Ankara Turkey

Cemil Cihad Gedik
Koç University, School of Medicine,
İstanbul, Turkey

Associate Editor and Social Media Editor

İlker Eren
Koç University, School of Medicine,
İstanbul, Turkey

Alper Şükrü Kendirci
İstanbul University-Cerrahpaşa,
School of Medicine, İstanbul, Turkey

Associate Editors

Kaya Akan
Okan University, School of Medicine,
İstanbul, Turkey

Turgut Akgül
İstanbul University, İstanbul School of
Medicine, İstanbul, Turkey

Umut Akgün
Acıbadem Mehmet Ali Aydınlar University,
School of Medicine, İstanbul, Turkey

Ata Can Atalar
Acıbadem Mehmet Ali Aydınlar University,
School of Medicine, İstanbul, Turkey

Umur Aydoğan
Penn State Hershey Medical Center,
Pennsylvania, USA

İbrahim Azboy
İstanbul Medipol University, İstanbul,
Turkey

Burak Beksaç
İstanbul, Turkey

Jason Cheung
Queen Mary Hospital, The University of
Hong Kong, Hong Kong

Derya Çelik
İstanbul University-Cerrahpaşa, Faculty
of Health Sciences, İstanbul, Turkey

Özgür Dede
Department of Orthopaedic Surgery,
UPMC Children's Hospital of Pittsburgh,
Pittsburgh, PA, USA

Nihat Demirhan Demirkıran
Department of Orthopedics and
Traumatology, Kültahya Health Sciences
University, School of Medicine, Evliya
Çelebi Education and Research Hospital,
Kütahya, Turkey

Mehmet Ali Deveci
Koç University, School of Medicine,
İstanbul, Turkey

Bülent Erdemli
Ankara University, School of Medicine,
Ankara, Turkey

Fabio Galbusera
IRCCS Istituto Ortopedico Galeazzi, via
Galeazzi 4, 20161 Milan, Italy

Emel Gönen
Koç University, School of Medicine,
İstanbul, Turkey

Gazi Huri
Hacettepe University, School of
Medicine, Ankara, Turkey

Ayşegül Ketenci
Department of Physical Medicine and
Rehabilitation, Koç University, İstanbul,
Turkey

Pembe Keskinöğlü
Dokuz Eylül University, School of
Medicine, İzmir, Turkey

Hakan Kınık
Ankara University, School of Medicine,
Ankara, Turkey

Esat Kiter
Odak Hospital, Denizli, Turkey

Chiu Chee Kidd
Department of Orthopaedic Surgery,
Faculty of Medicine, University of
Malaya, Kuala Lumpur, W. Persekutuan
Kuala Lumpur, Malaysia

Salih Marangoz
Acıbadem Mehmet Ali Aydınlar University,
School of Medicine, İstanbul, Turkey

Bjarne Møller-Madsen
Aarhus University Hospital, Aarhus,
Denmark

Haluk Özcanlı
Akdeniz University, School of Medicine,
Antalya, Turkey

Tuna Özyürekeoğlu
Department of Surgery, Division of Hand
Surgery, Christine M Kleinert Institute
for Hand and Microsurgery, University of
Louisville, USA

Gökhan Polat
İstanbul University, School of Medicine,
İstanbul, Turkey

Dündar Sabah
Ege University, School of Medicine,
İzmir, Turkey

Aksel Seyahi
Koç University, School of Medicine,
İstanbul, Turkey

Alpaslan Şenköylü
Gazi University, School of Medicine,
Ankara, Turkey

Ali Turgut
İzmir Tepecik Training and Research
Hospital, İzmir, Turkey

Rajeev Vohra
Department of Orthopaedics, Amandeep
Hospital, Amritsar, India

Merter Yalçınkaya
Bahçeşehir University, School of
Medicine, İstanbul, Turkey

International Scientific Review Consultants

Gregory J. Della Roca
University of Missouri, Orthopaedics,
Columbia, Missouri

Enrique Gomez-Barrena
Department of Orthopedics and
Traumatology, Hospital Universitario La
Paz, Universidad Autónoma de Madrid,
Madrid, Spain



AOTT

ACTA ORTHOPAEDICA et TRAUMATOLOGICA TURCICA

AIMS AND SCOPE

Acta Orthopaedica et Traumatologica Turcica (AOTT) is a scientific, open access periodical published by independent, unbiased, and double-blinded peer-review principles. The journal is the official publication of the Turkish Association of Orthopaedics and Traumatology and the Turkish Society of Orthopaedics and Traumatology. It is published bimonthly in January, March, May, July, September, and November. The publication language of the journal is English.

The aim of the journal is to publish original studies of the highest scientific and clinical value in orthopedics, traumatology, and related disciplines. The scope of the journal includes but not limited to diagnostic, treatment, and prevention methods related to orthopedics and traumatology. Acta Orthopaedica et Traumatologica Turcica publishes clinical and basic research articles, case reports, personal clinical and technical notes, systematic reviews and meta-analyses and letters to the Editor. Proceedings of scientific meetings are also considered for publication.

The target audience of the journal includes healthcare professionals, physicians, and researchers who are interested or working in orthopedics and traumatology field, and related disciplines.

Acta Orthopaedica et Traumatologica Turcica is currently indexed in Web of Science-Science Citation Index Expanded, PubMed/Medline, PubMed Central, Scopus, DOAJ, CNKI and TUBITAK ULAKBIM TR Index.

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the International Committee of Medical Journal Editors (ICMJE), World Association of Medical Editors (WAME), Council of Science Editors (CSE), Committee on Publication Ethics (COPE), European Association of Science Editors (EASE), and National Information Standards Organization (NISO). The journal is in conformity with the Principles of Transparency and Best Practice in Scholarly Publishing (doaj.org/bestpractice).

All manuscripts must be submitted via the online submission system, which is available at www.aott.org.tr. The journal guidelines, technical information, and the required forms are available on the journal's web page.

Expenses of the journal are covered by the article processing charges and the financial support received from the Turkish Association of Orthopaedics and Traumatology and the Turkish Society of Orthopaedics and Traumatology. Potential advertisers should contact the Editorial Office. Advertisement images are published only upon the Editor-in-Chief's approval.

Statements or opinions expressed in the manuscripts published in the journal reflect the views of the author(s) and not the opinions of the Turkish Association of Orthopaedics and Traumatology, editors, editorial board, and/or publisher; the editors, editorial board, and publisher disclaim any responsibility or liability for such materials.

All published content is available online, free of charge at www.aott.org.tr.

Turkish Association of Orthopaedics and Traumatology holds the international copyright of all the content published in the journal. The journal's content is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

Editor-in-Chief: Prof. Dr. Haluk Berk

Address: TOTDER Genel Merkezi, Şehremini, Koyuncu Sk. No: 4/5, 34104 Fatih, İstanbul, Turkey

Phone: +90 212 530 15 08

Fax: +90 212 530 15 21

E-mail: editor@aott.org.tr

Publisher: AVES

Address: Büyükdere Cad., 105/9 34394 Mecidiyeköy, Şişli, İstanbul, Turkey

Phone: +90 212 217 17 00

Fax: +90 212 217 22 92

E-mail: info@avesyayincilik.com

Web page: www.avesyayincilik.com



AOTT

ACTA ORTHOPAEDICA et TRAUMATOLOGICA TURCICA

CONTENTS

Editorial

- 294 Editorial**
Haluk Berk

Invited Reviews

- 296 Medical care following earthquakes: Clinical, organizational, and logistic challenges**
Elhanan Bar-On
- 301 Orthopedic surgery in disaster**
Burak Altintas, David L. Helfet
- 306 Destructive disasters, trauma, crush syndrome, and beyond**
Mehmet Şükriü Sever, Yusuf Alper Katı, Ufuk Özkaya

Research Articles

- 315 The initial response of a local hospital in the earthquake zone during the February 6, 2023 Kahramanmaraş earthquakes: Injuries and challenges**
Muhammed Köroğlu, Mustafa Karakaplan, Emre Ergen, Kadir Ertem, İdris Çoban, Harun Köse, Neslihan Yücel, Murat Bıçakçioğlu, Ayşe Belin Özer, Oya Olcay Özdeş, Hüseyin Utku Özdeş, Okan Aslantürk
- 322 Management preferences of orthopedic surgeons in developmental dysplasia of the hip under 1 year of age in Türkiye: Results of a nationwide cross-sectional survey**
Baki Volkan Çetin, Sancar Bakırcioğlu, Sadettin Çiftci, Mehmet Salih Söylemez, Serkan Erkuş, Yalçın Turhan, İsmet Yalkın Çamurcu, Serda Duman, Timur Yıldırım, Kaya Memişoğlu, Hakan Şenaran, Hakan Ömeroğlu
- 329 Closed versus medial open reduction in the treatment of developmental dysplasia of the hip under age 1: A retrospective comparative study**
Sancar Bakırcioğlu, Rıza Mert Cetik, Murat Danisman, Mehmet Askin, Muhammed Abdulkadir Bulut, Guney Yılmaz
- 334 Biomechanical effect of increased number of suture strands on rotator cuff repair in a bovine model**
Jiaqi Cheng, Zhijie Li, Chunning Luo, Hui Ben, Yucheng Sun
- 340 Self-assessment of range of motion in patients undergoing surgery for a unilateral shoulder condition**
Eirik Solheim, Maja Rosenlund, Karen Gjørwad Ulsaker, Anagha P. Parkar
- 348 The effect of reduced acromiohumeral distance and increased acromial thickness on the risk of rotator cuff tear**
Enver Kiliç, Olgun Bingöl, Güzelali Özdemir, Ömer Halit Keskin, Alper Deveci
- 352 Wedge osteotomy combined with internal fixation in the treatment of Mayo IIB olecranon fractures**
Youdi Xue, Shuguang Wang, Zhaohong Wang, Hongguang Song, Kun Shi
- 357 Correlation between electrodiagnostic severity and Boston carpal tunnel questionnaire in surgically treated carpal tunnel syndrome patients**
Jung Hoi Koo, Joo-Yul Bae, Kiwon Lee, Ha Sung Park



A O T T

ACTA ORTHOPAEDICA et TRAUMATOLOGICA TURCICA

- 361 Distal radius fractures: What are the effects of ulnar styloid fracture and face-to-face rehabilitation on the functional outcome?**
Hakan Ozben, Serkan Uludag, Yaprak Ataker, Sibel Comert Ece, Eftal Gudemez
- 366 Clinical and radiographic outcomes of negative pressure wound therapy combined with polymethylmethacrylate sealant for wound management of Gustilo type III open tibia fractures**
Youngwoo Kim, Chae Gwan Kong, Ho Youn Park, Kwan Soo Lee, Yoo Joon Sur
- 372 A new femur intramedullary nail with tube and coil spring for maximum interfragmentary rotational and axial stability after fracture site resorption**
Ahmet Adnan Karaarslan, Kamil Yamak
- 378 The effect of triple-dose-intravenous tranexamic acid on blood loss in patients undergoing total hip arthroplasty without affecting blood coagulopathy: A prospective thromboelastographic analysis**
Wang-yi Jin, Zi-wen Yan, Xing Zhang, Sheng Pan, Chao-ran Huang, Kai-jin Guo, Xin Zheng
- 384 Feasibility of diagnosing osteoporosis using routine computed tomography scans for hip fractures: Correlation with histopathological diagnosis of head and neck regions**
Yunus Imren, Bulent Karstoglu, Suleyman Semih Dedeoglu, Ahmet Keskin, Ahmet Firat Berkay, Ali Cagri Tekin