



TURKISH SOCIETY OF PHYSICAL MEDICINE AND REHABILITATION

TURKISH JOURNAL OF PHYSICAL MEDICINE AND REHABILITATION

Formerly published as **Türkiye Fiziksel Tıp ve Rehabilitasyon Dergisi**

Editor

Duygu Geler Külcü

Associate Editors

Burcu Yanık
Merve Örücü Atar
Özge Kenış Coşkun
Şebnem Koldaş Doğan
Tuğçe Özaklı Mısırlıoğlu



Indexed in
SCI-E & PMC



TURKISH JOURNAL OF PHYSICAL MEDICINE AND REHABILITATION

Formerly published as **Türkiye Fiziksel Tıp ve Rehabilitasyon Dergisi**

Founders / Kurucular

Osman Cevdet Çubukçu
Derviş Manizade
Aziz Sevüktakin
Akif Şakir Şakar

Owner on Behalf of Turkish Society of Physical Medicine and Rehabilitation and Responsible Manager

Kenan Akgün
Istanbul University - Cerrahpaşa, İstanbul, Türkiye

Editor

Duygu Geler Külcü
University of Health Sciences International School of Medicine, İstanbul, Türkiye

Associate Editors

Burcu Yanık <i>Ankara Bilkent City Hospital, Ankara, Türkiye</i>	Şebnem Koldaş Doğan <i>University of Health Sciences, Antalya, Türkiye</i>
Merve Örücü Atar <i>Ankara Gaziler Physical Therapy and Rehabilitation Hospital, Ankara, Türkiye</i>	Tuğçe Özlekli Mısırlıoğlu <i>Istanbul University Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye</i>
Özge Keniş Coşkun <i>Marmara University Faculty of Medicine, İstanbul, Türkiye</i>	

Statistics Consultants

Can Ateş <i>Aksaray University Faculty of Medicine, Aksaray, Türkiye</i>	İrem Kar <i>Ankara University Faculty of Medicine, Ankara, Türkiye</i>
Derya Gökmən <i>Ankara University Faculty of Medicine, Ankara, Türkiye</i>	Kürşad Nuri Baydili <i>University of Health Sciences, Hamidiye Faculty of Medicine, İstanbul, Türkiye</i>
Duygu Siddikoğlu <i>Çanakkale Onsekiz Mart University Faculty of Medicine, Çanakkale, Türkiye</i>	Selman Aktaş <i>University of Health Sciences, Hamidiye Faculty of Medicine, İstanbul, Türkiye</i>
Ebru Dumlupınar <i>Ankara University Faculty of Medicine, Ankara, Türkiye</i>	Zeynep Yavuz <i>Hittit University Faculty of Medicine, Çorum, Türkiye</i>
Elif Ciğdem Keleş <i>Yeditepe University Faculty of Medicine, İstanbul, Türkiye</i>	

Türkiye Fiziksel Tıp ve Rehabilitasyon Derneği
Adına Sahibi ve Sorumlu Yazı İşleri Müdürü
Kenan Akgün

Executive Office / Yönetim Yeri ve Adresi
Büyükdere Cad. Arzu Apt. No: 99, Kat: 4, D: 8-9,
34394 Mecidiyeköy, İstanbul, Türkiye.
Tel: +90 212 236 90 52
Fax: +90 212 236 90 54
URL: <http://www.turkishjournalpmr.com>
<http://www.ftrdergisi.com>

Editorial Contact Person / Editöryal İletişim
Duygu Geler Külcü
E-mail / E-posta: info@turkishjournalpmr.com
info@ftrdergisi.com

Publisher / Yayımcı
Bayçınar Tıbbi Yayıncılık
Örnek Mah. Dr. Suphi Egzi Sok., No: 11, D: 6,
34704 Ataşehir, İstanbul, Türkiye
Tel: +90 216 317 41 14
e-mail / e-posta: info@baycinartibbiyyayincilik.com
Yayınçı Sertifika No: S2284

Publishing date / Yayın tarihi
August 26, 2024 / 26 Ağustos 2024

Type of publication / Yayın Türü
Periodical / Yerel Süreli

The Turkish Journal of Physical Medicine and Rehabilitation is indexed by Science Citation Index Expanded, PubMed Central, EMBASE, Scopus, CINAHL, Gale/Cengage Learning, EBSCO, Index Copernicus, TUBITAK ULAKBİM TR Index and Türkiye Citation Index.

All rights are reserved. Rights to the use and reproduction, including in the electronic media, of all communications, papers, photographs and illustrations appearing in this journal are the properties of the Turkish Journal of Physical Medicine and Rehabilitation, reproduction without prior written permission of part or all of and material is not permitted. The journal complies with the Professional Principles of the Press.

The control of conformity with the journal standards and the typesetting of the articles in this journal, the control of the abstracts and references and the preparation of the journal for publishing were conducted by Bayçınar Medical Publishing.

Scientific Advisory Board

Alessandro Giustini

Rehabilitation Unit, Ospedale Sanpancrazio Santostefano Rehabilitation Group,
Arco, Trento, Italy

Amparo Martinez Assucena

Hospital of Requena, Valencia, Spain

Arzu On

Ege University, İzmir, Türkiye

Aydan Oral

Istanbul University, İstanbul, Türkiye

Aysən Küçükdeveci

Ankara University, Ankara, Türkiye

Ayşe Yalman

Istanbul University, İstanbul, Türkiye

Ayşegül Ketenci

İstanbul University, İstanbul, Türkiye

Banu Kuran

Yeni Yüzyıl University, İstanbul, Türkiye

Belgin Erhan

Istanbul Medeniyet Üniversitesi, İstanbul, Türkiye

Birkan Sonel Tur

Ankara University, Ankara, Türkiye

Canan Tızkız

Adnan Menderes University, Aydın, Türkiye

Carl Chen

Chang Gung Memorial Hospital,
Taipei, Taiwan

Deniz Evcik

Güven Hospital, Ankara, Türkiye

Chang-II Park

Konyang University, Daejeon, Korea

Dilşad Sindel

Istanbul University, İstanbul, Türkiye

Elena Ilieva

Plovdiv Medical University,
Plovdiv, Bulgaria

Elif Akalın

Dokuz Eylül University, İzmir, Türkiye

Erkan Kozanoğlu

Çukurova University, Adana, Türkiye

Farooq Rathore

Bahria University, Karachi, Pakistan

Fary Khan

Monash University, Melbourne,
Australia

Farzaneh Torkan

Shefa Research Center, Tehran, Iran

Francesca Gimigliano

University of Campania
"Luigi Vanvitelli", Caserta, Italy

Frederick Frost

Case Western Reserve University,
Cleveland, Ohio, USA

Fumihiro Tajima

Wakayama Medical University,
School of Medicine, Wakayama, Japan

Füsun Ardiç

Pamukkale University, Denizli, Türkiye

Füsun Köseoglu

TOBB ETU Hospital, Ankara, Türkiye

Füsun Şahin

Private Clinic, Denizli, Türkiye

Gabor Fazekas

National Institute for Medical Rehabilitation,
Budapest, Hungary

Gordana Stefanovski

Institute of PRM "Dr M. Zotovic", Banja
Luka, Bosnia and Herzegovina

Gülseren Akyüz

Marmara University, İstanbul, Türkiye

Hatice Bodur

Yıldırım Beyazıt University, Ankara, Türkiye

Haydar Gök

Ankara University, Ankara, Türkiye

Helena Burger

University Rehabilitation Institute,
Ljubljana, Slovenia

İlker Yağıçı

Marmara University, İstanbul, Türkiye

July Treger

Soroka Medical University,
Beer-Sheva, Israel

Jale İrdesel

Uludağ University, Bursa, Türkiye

Jolanta Kujawka

Medical University of Lodz, Lodz, Poland

Jorge Lains

Rehabilitation Centre for the Central Region
of Portugal, Rovisco Pais Hospital,
Tocha, Portugal

Juan Manuel Guzman

Clinica De Rehabilitacion,
Mexico City, Mexico

Kenan Akgün

Istanbul University, İstanbul, Türkiye

Khalil Al-Abbadı

Arab Center For Physical & Rehabilitation
Medicine, Amman, Jordan

Luh K Wahyuni

University of Indonesia, Jakarta, Indonesia

Lydia Abdul Latif

Malaysia University of Malaysia,
Kuala Lumpur, Malaysia

Mansoor Rayegani

Shahid Beheshti University,
Tehran, Iran

Mark A. Young

Maryland Rehabilitation Center,
Baltimore, Maryland, USA

Merve Örücü Atar

Ankara Gaziler Physical Therapy and
Rehabilitation Hospital, Ankara, Türkiye

Meltem Vural

University of Health Sciences,
İstanbul, Türkiye

Milica Lazovic

University of Belgrade, Belgrade, Serbia

Müfit Akyüz

Karabük University, Karabük, Türkiye

Murat Zinnuroğlu

Gazi University, Ankara, Türkiye

N. Kutay Ordu Gökkaya

University of Health Sciences, Ankara, Türkiye

Nachum Soroker

Tel-Aviv University, Tel Aviv, Israel

Nurdan Paker

University of Health Sciences, İstanbul, Türkiye

Ömer Faruk Şendür

Adnan Menderes University, Aydın, Türkiye

Özlen Peker

Dokuz Eylül University, İzmir, Türkiye

Peter Lim Ai Chi

Baylor College of Medicine,
Singapore - Houston, Texas, USA

Rajesh Pramanik

IPGMER & SSKM Hospital,
Kolkata, India

Rengin Güzel

Çukurova University, Adana, Türkiye

Resa Aydin

İstanbul University, İstanbul, Türkiye

Safije Tuncer

Ankara University, Ankara, Türkiye

Saime Ay

Ufuk University, Ankara, Türkiye

Sibel Eyiğör

Ege University, İzmir, Türkiye

Şehim Kutlay

Ankara University, Ankara, Türkiye

Simon F.T. Tang

Chang Gung University, Taipei, Taiwan

Soumya Chatterjee

Case Western Reserve University,
Cleveland, Ohio, USA

Taslim Uddin

BSM Medical University,
Dhaka, Bangladesh

Ülkü Zeynep Akarırmak

İstanbul University, İstanbul, Türkiye

Yeşim Kirazlı

Ege University, İzmir, Türkiye

Zeynep Güven

Acıbadem University, İstanbul, Türkiye

Zohra Ben Salah

University Hospital of Monastir,
Monastir, Tunisia

CONTENTS

INVITED REVIEW

- 293 Robot-assisted gait training in stroke
Şebnem Koldaş Doğan

ORIGINAL ARTICLES

- 300 Effects of Tai Chi exercise on pain, functional status, and quality of life in patients with osteoarthritis or inflammatory arthritis
Nataša Kalebota, Nadica Laktašić Žerjavić, Kristina Kovač Durmiš, Milan Milošević, Antun Andreić, Biljana Končar, Mladen Vedriš, Petar Turković, Nikolino Žura, Iva Zagarić, Mislav Pap, Porin Perić
- 309 Short-term effectiveness of epidermis dermis fascia kinesiotaping technique in myofascial pain syndrome on upper trapezius: A multi-center, double-blind, randomized clinical study
Duygu Geler Külcü, Arzu Dinç Yavaş, Bahar Çakmak, Belgin Erhan, Birkana Sonel Tur, Figen Ayhan, Gül Tuğba Bulut, Merve Soysal, Nilgün Mesci, Zeynep Alpoğuz, Kamil Yazıcıoğlu, Elif Çığdem Keleş
- 319 Effectiveness of Rocabado exercises in patients with rheumatoid arthritis in remission with temporomandibular joint involvement: A randomized-controlled study
Manolya İlhanlı, İlker İlhanlı, Simay Aksakallı
- 327 Effects of intra-articular versus peri-articular dextrose prolotherapy in knee osteoarthritis: A clinical trial study
Leila Sadat Mohamadi Jahromi, Hadi Dashtimakan, Sharareh Roshanzamir, Alireza Dabbaghmanesh, Reyhaneh Parvin
- 335 Clinical effect of acupuncture on knee osteoarthritis and its effect on p38 MAPK signaling pathway
Ye Wei, Lanying Liu, Hengqing Ge
- 344 Comparison of the effect of separate and simultaneous application of Tecar therapy and low-level laser therapy on the neurological symptoms of type 2 diabetic patients with peripheral neuropathy of lower limbs
Mitra Javan Amoli, Khosro Khademi-Kalantari, Maryam Niajalili, Aliyeh Daryabor, Sedigheh Sadat Naimi
- 358 Investigation of the effects of different treatment approaches on lumbar stabilizer muscles and diaphragm motility in individuals with chronic low back pain
Kansu Kanlı, Pembe Hare Yigitoglu, Ahmet Özgül
- 370 Effectiveness of static, dynamic and combined dry needling techniques in the management of myofascial pain syndrome: A three-group study
Emre Ata, Mürvet Arda, Ece Küçük, Mustafa Hüseyin Temel, Mehmet Akif Güler, Tuğba Özsoy Ünubol
- 379 The effect of osteoporosis education on osteoporosis knowledge level and daily life in Parkinson's disease patients: A 12-week, randomized-controlled trial
Muhammed Abdulkérim Şahin, Mustafa Doğukan Aydemir, Berril Dönmez Çolakoğlu, Raif Çakmur, Belgin Ünal, Selmin Gülbahar
- 390 Does transforaminal epidural steroid injection added to dorsal root ganglion pulsed radiofrequency treatment increase efficacy?
Gökhan Yıldız, Hamit Goksu, Erkan Yavuz Akcaboy, Seref Celik, Mustafa Yemliha Ayhan, Samet Sancar Kaya

CASE REPORTS

- 397 Effect of low-frequency repetitive magnetic transcranial stimulation in hemichorea-hemiballismus with ipsilateral basal ganglia hemorrhage: A case report
Kim Heejae
- 402 Posture-induced compressive peroneal neuropathy during harvesting season: A case series
Aylin Sarıyıldız
- 406 Another lesson from the earthquake: Transdermal fentanyl dependence in two child victims
Hüseyin Oğuzhan Aslantaş, Şehim Kutlay, Haydar Gök, Birkana Sonel Tur, Beyza Özkan, Süveyda Dilara Başar
- 410 From low back pain to Takayasu arteritis: A rare case report
Sefa Tan, Banu Gokcen Tan, Zafer Gunendi