



www.tepecikdersisi.com

Founder

Hilmi KUMCUOĞLU

Owner

Tepecik Education and Research Hospital
chief physician Mustafa EMİROĞLU

Editor in Chief

Yusuf Özlem İLBEY
Tepecik Education and Research Hospital, Urology
özlemyusufilbey@hotmail.com
ORCID: 0000-0002-1483-9160

Associate Editors

Mustafa EMİROĞLU
Tepecik Education and Research Hospital, General
Surgery
musemiroglu@gmail.com
ORCID: 0000-0002-4968-2570

Defne ENGÜR
Tepecik Education and Research Hospital, Newborn
Clinic
defneka@hotmail.com
ORCID: 0000-0003-0405-085X

Pınar GENÇPINAR
Child Health and Diseases, Child Neurology
Specialist
drpinargencpinar@yahoo.com
ORCID: 0000-0002-3223-5408

Mehmet Zeynel KESKİN
Tepecik Education and Research Hospital, Urology
zeynel_akd@hotmail.com
ORCID: 0000-0002-9206-5586

Gürsoy PALA
Tepecik Education and Research Hospital,
Gynecology and Obstetrics Clinic
gursoypala@yahoo.com
ORCID: 0000-0003-1569-4474

Cenk SARI
Tepecik Education and Research Hospital, Cardiology
drcenk Sari@gmail.com
ORCID: 0000-0003-1115-493X

Administrative Office

T.C. Sağlık Bakanlığı İzmir Tepecik E.A.H.
Güney Mahallesi, 1140/1. Sk. No:1, 35180
Yenişehir/Konak/İzmir

Language Editors

Gürkan KAZANCI - Ümit ÖZKAN

Graphics

Arzu Deniz ÖLMEZ - Ayfer ERYEŞİL

Publication Coordinator

Hira Gizem FİDAN

Publication Type: Periodical

Publisher

LOGOS YAYINCILIK TİC. A.Ş.
Yıldız Posta Cad. Sinan Apt. No. 36 D. 63/64
34349 Gayrettepe-İstanbul



Tel : (0212) 288 05 41
Faks : (0212) 211 61 85
E-mail : logos@logos.com.tr
web : www.logosyayincilik.com

ISSN 1305-7073

e-ISSN 1305-7146

Tepecik Eğitim ve Araştırma Hastanesi Dergisi

The Journal of Tepecik Education and Research Hospital

Volume 31
Number 3
August 2021

*The journal of Tepecik Education and Research Hospital is the official journal of the
İzmir Tepecik Education and Research Hospital.*

It is published three times a year (April, August, December).

*TERH Journal is an open Access, free and peer-reviewed journal and indexed in
EBSCO (2020), Index Copernicus and ULAKBİM TR Dizin.*

©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 belong to the Journal of Tepecik Education and Research Hospital. Reproduction without prior written permission of part or all of any material is forbidden. The journal complies with the Professional Principles of the Press.

This journal is printed on acid-free paper

Published with the contributions of ESRA ARAÇ Co.



www.tepecikdergisi.com

Previous Editors

Işın YAPRAK
Ragıp KAYAR
Cengiz Özbek
A. Gülden DİNİZ

Advisory Board

Zehra Hilal ADIBELLI

University of Health Sciences
Bozyaka Health Application
and Research Center,
Radiology Clinic, Assoc. Prof.
MD., Izmir

Harun AKAR

University of Health Sciences
Tepecik Health Application
and Research Center, Internal
Medicine Clinic, Prof. MD.,
Izmir

Cezmi AKKIN

Ege University Faculty of
Medicine, Department of
Ophthalmology, Prof. MD.,
Izmir

Gül AKTAN

Ege University Faculty of
Medicine, Department of
Pediatrics, Prof. MD., Izmir

Ekin Özgür AKTAŞ

Ege University Faculty of
Medicine, Department of
Forensic Medicine, Prof. MD.,
Izmir

Safiye AKTAŞ

Dokuz Eylül University,
Institute of Oncology,
Department of Basic
Oncology, Prof. MD., Izmir

Demet ALAYGUT

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatric
Nephrology Clinic, Assoc.
Prof. MD., Izmir

Ayşe Berna ANIL

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatrics
Clinic, Prof. MD., Izmir

Murat ANIL

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatrics
Clinic, Assoc. Prof. MD., Izmir

Fazil APAYDIN

Ege University Faculty of
Medicine, Department of
Otorhinolaryngology, Prof.
MD., Izmir

Ilker Burak ARSLAN

University of Health Sciences
Tepecik Health Application
and Research Center,
Otorhinolaryngology Clinic,
Assoc. Prof. MD., Izmir

Suna ASİLSOY

Dokuz Eylül University Faculty
of Medicine, Department of
Pediatrics, Division of Pediatric
Allergy, Prof. MD., Izmir

Arzu AVCI

Izmir Atatürk Training and
Research Hospital, Medical
Pathology Clinic, Assoc. Prof.
MD., Izmir

Cengiz AYDIN

University of Health Sciences
Tepecik Health Application
and Research Center, General
Surgery Clinic, Prof. MD.,
Izmir

Semin AYHAN

Celal Bayar University Faculty
of Medicine, Department of
Medical Pathology, Prof. MD.,
Manisa

Ali Rahmi BAKİLER

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatric
Cardiology Clinic, Prof. MD.,
Izmir

Oya BALTALI

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatrics
Clinic, Assoc. Prof. MD.,
Izmir

Maşallah BARAN

Katip Çelebi University,
Faculty of Medicine,
Department of Pediatrics,
Division of Pediatric
Gastroenterology, Assoc.
Prof. MD., Izmir

Selen BAYRAKTAROĞLU

Ege University Faculty of
Medicine, Department of
Radiology, Assoc. Prof. MD.,
Izmir

Oktay BİLGİ

University of Health Sciences
Bozyaka Health Application
and Research Center,
Hematology Clinic, Assoc.
Prof. MD., Izmir

Giray BOZKAYA

University of Health Sciences
Bozyaka Health Application
and Research Center, Pediatric
Genetics Clinic, Assoc. Prof.
MD., Izmir

Pervin BOZKURT

Istanbul University Cerrahpaşa
Medical Faculty, Department
of Anesthesiology and
Reanimation, Prof. MD.,
Istanbul

Demet CAN

Balikesir University Faculty of
Medicine, Department of
Pediatrics, Prof. MD., Balikesir

Gül CANER MERCAN

University of Health Sciences
Tepecik Health Application
and Research Center,
Otorhinolaryngology Clinic,
Assoc. Prof. MD., Izmir

Cengiz CEYLAN

University of Health Sciences
Tepecik Health Application
and Research Center,
Hematology Clinic, Assoc.
Prof. MD., Izmir

Izzetkiye Ebru ÇAKIR

Katip Çelebi University Faculty
of Medicine, Department of
Medical Pathology, Prof. MD.,
Izmir

Şebnem ÇALKAVUR

University of Health Sciences
Dr Behçet Uz Health
Application and Research
Center, Neonatology Clinic,
Assoc. Prof. MD., Izmir

Taner ÇAMSARI

Dokuz Eylül University Faculty
of Medicine, Department of
Nephrology, Assoc. Prof. MD.,
Izmir

Gönül ÇATLI

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatrics
Clinic, Assoc. Prof. MD., Izmir

Seçil ARSLANSOYU ÇAMLAR

University of Health Sciences
Tepecik Health Application
and Research Center, Pediatric
Nephrology Clinic, Assoc.
Prof. MD. Izmir

Tanju ÇELİK

University of Health Sciences
Dr Behçet Uz Health
Application and Research
Center, Pediatrics Clinic,
Assoc. Prof. MD.,
Izmir

Ayfer ÇOLAK

University of Health Sciences
Tepecik Health Application
and Research Center, Medical
Biochemistry Clinic, Assoc.
Prof. MD., Izmir

Hülya ÇOLAK

University of Health Sciences
Tepecik Health Application
and Research Center,
Nephrology Clinic, Assoc.
Prof. MD., Izmir

Ibrahim ÇUKUROVA

University of Health Sciences
Tepecik Health Application
and Research Center,
Otorhinolaryngology Clinic,
Prof. MD., Izmir

Fusun DEMİRÇİVİ ÖZER

University of Health Sciences
Tepecik Health Application
and Research Center,
Neurosurgery Clinic, Prof.
MD., Izmir

Tevfik DORAK

Kingston University Faculty of
Science, Engineering and
Computing, Prof. MD.,
London, UK

Bumin Nuri DÜNDAR

Katip Çelebi University Faculty
of Medicine, Department of
Pediatrics, Division of Pediatric
Endocrinology, Prof. MD.,
Izmir



Kayı ELİAÇIK

University of Health Sciences Tepecik Health Application and Research Center, Pediatrics Clinic, Assoc. Prof. MD., Izmir

Nuket ELİYATKIN

Adnan Menderes University Faculty of Medicine, Department of Medical Pathology, Assoc. Prof. MD., Aydin

Hülya ELLİDOKUZ

Dokuz Eylül University Faculty of Medicine, Department of Public Health, Prof. MD., Izmir

Mustafa EMİROĞLU

University of Health Sciences Tepecik Health Application and Research Center, General Surgery Clinic, Assoc. Prof. MD., Izmir

Erhan ESER

Celal Bayar University Faculty of Medicine, Department of Public Health, Prof. MD., Manisa

Demet ETİT

Katip Çelebi University Faculty of Medicine, Department of Medical Pathology, Assoc. Prof. MD., Izmir

Ferah GENEL

University of Health Sciences Dr Behçet Uz Health Application and Research Center, Pediatric Immunology and Allergy Clinic, Prof. MD., Izmir

Pınar GENÇPINAR

Katip Çelebi University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology, Assoc. Prof. MD., Izmir

Ahmet GÜL

Istanbul University Istanbul Medical Faculty, Department of Rheumatology, Prof. MD., Istanbul

İbrahim GÜLHAN

University of Health Sciences Tepecik Health Application and Research Center, Obstetrics and Gynecology Clinic, Assoc. Prof. MD., Izmir

Mehmet HELVACI

University of Health Sciences Tepecik Health Application and Research Center, Pediatrics Clinic, Prof. MD., Izmir

Münevver HOŞGÖR

University of Health Sciences Dr Behçet Uz Health Application and Research Center, Pediatric Surgery Clinic, Prof. MD., Izmir

Yusuf Özlem İLBEY

University of Health Sciences Tepecik Health Application and Research Center, Urology Clinic, Prof. MD., Izmir

Tolga İNCE

Dokuz Eylül University Faculty of Medicine, Department of Pediatrics, Division of Social Pediatrics, Assoc. Prof. MD., Izmir

Sema KALKAN UÇAR

Ege University Faculty of Medicine, Department of Pediatrics, Prof. MD., Izmir

Ali KANIK

University of Health Sciences Tepecik Health Application and Research Center, Pediatrics Clinic, Assoc. Prof. MD., Izmir

Levent KARAPINAR

University of Health Sciences Tepecik Health Application and Research Center, Orthopedics and Traumatology Clinic, Assoc. Prof. MD., Izmir

Belde KASAP DEMİR

Katip Çelebi University Faculty of Medicine, Department of Pediatrics, Prof. MD., Izmir

Ahmet KAYA

University of Health Sciences Tepecik Health Application and Research Center, Orthopedics and Traumatology Clinic, Assoc. Prof. MD., Izmir

Dayimi KAYA

Dokuz Eylül University Faculty of Medicine, Department of Cardiology, Prof. MD., Izmir

Ragıp KAYAR

General Surgery, Assoc. Prof. MD., Izmir

Aykut KEFİ

Dokuz Eylül University Faculty of Medicine, Department of Urology, Prof. MD., Izmir

Mehmet Zeynel KESKİN

University of Health Sciences Tepecik Health Application and Research Center, Urology Clinic, Assoc. Prof. MD., Izmir

Yasemin KILIÇ ÖZTÜRK

University of Health Sciences Tepecik Health Application and Research Center, Family Medicine Clinic, Assoc. Prof. MD., Izmir

Barış KILIÇASLAN

University of Health Sciences Tepecik Health Application and Research Center, Cardiology Clinic, Assoc. Prof. MD., Izmir

Cenk KIRAKLI

University of Health Sciences Suat Seren Pulmonary Diseases and Thoracic Surgery Health Application and Research Center, Pulmonary Diseases Clinic, Assoc. Prof. MD., Izmir

Tayfun KIRAZLI

Ege University Faculty of Medicine, Department of Otorhinolaryngology, Prof. MD., Izmir

Gökhan KÖYLÜOĞLU

Katip Çelebi University Faculty of Medicine, Department of Pediatric Surgery, Prof. MD., Izmir

Şükran KÖSE

University of Health Sciences Tepecik Health Application and Research Center, Infectious Diseases Clinic, Prof. MD., Izmir

Semra HIZ

Dokuz Eylül University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology, Prof. MD., Izmir

Nilgün KÜLTÜRSAY

Ege University Faculty of Medicine, Department of Pediatrics, Division of Neonatology, Prof. MD., Izmir

Haluk MERGEN

University of Health Sciences Tepecik Health Application and Research Center, Family Medicine Clinic, Prof. MD., Izmir

Timur MEŞE

University of Health Sciences Dr Behçet Uz Health Application and Research Center, Pediatric Cardiology Clinic, Assoc. Prof. MD., Izmir

Fatma MUTLUBAŞ

University of Health Sciences Tepecik Health Application and Research Center, Pediatric Nephrology Clinic, Prof. MD., Izmir

Nazmi NARİN

Katip Çelebi University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Cardiology, Prof. MD., Izmir

Nihal OLGAC DÜNDAR

Katip Çelebi University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology, Prof. MD., Izmir

Nur OLGUN

Dokuz Eylül University Institute of Oncology, Department of Clinical Oncology, Prof. MD., Izmir

Mustafa OLGUNER

Dokuz Eylül University Faculty of Medicine, Department of Pediatric Surgery, Prof. MD., Izmir

Özgür OLUKMAN

Çiğli Training and Research Hospital, Neonatology Clinic, Assoc. Prof. MD., Izmir

Resmiye ORAL

University of Iowa Stead Family, Department of Pediatrics, Prof. MD., USA

Yeşim OYMAK

University of Health Sciences Dr Behçet Uz Health Application and Research Center, Pediatric Hematology and Oncology Clinic, Assoc. Prof. MD., Izmir

Dilek ÖNCEL

University of Health Sciences Tepecik Health Application and Research Center, Radiology Clinic, Assoc. Prof. MD., Izmir



Mehmet Yekta ÖNCEL

University of Health Sciences Tepecik Health Application and Research Center, Neonatology Clinic, Assoc. Prof. MD., Izmir

Hale ÖREN

Dokuz Eylül University Faculty of Medicine, Department of Pediatric Hematology and Oncology, Prof. MD., Izmir

Öner ÖZDOĞAN

University of Health Sciences Tepecik Health Application and Research Center, Cardiology Clinic, Assoc. Prof. MD., Izmir

Erdener ÖZER

Dokuz Eylül University Faculty of Medicine, Department of Medical Pathology, Prof. MD., Izmir

Mehmet ÖZEREN

University of Health Sciences Tepecik Health Application and Research Center, Obstetrics and Gynecology Clinic, Prof. MD., Izmir

Nuray ÖZGÜLNAR

Istanbul University Istanbul Medical Faculty, Department of Public Health, Prof. MD., Istanbul

Deniz ÖZTEKİN

University of Health Sciences Tepecik Health Application and Research Center, Obstetrics and Gynecology Clinic, Assoc. Prof. MD., Izmir

Mehmet Burak ÖZTOP

Izmir Provincial Health Directorate, General Surgery Specialist, MD., Izmir

Emel Ebru PALA

University of Health Sciences Tepecik Health Application and Research Center, Medical Pathology Clinic, Assoc. Prof. MD., Izmir

İbrahim PİRİM

Izmir Katip Çelebi University Faculty of Medicine, Department of Medical Biology and Genetics, Prof. MD., Izmir

Münire Ece SABAH

Ege University Faculty of Dentistry, Department of Orthodontics, Prof. MD., Izmir

Muzaffer SANCI

University of Health Sciences Tepecik Health Application and Research Center, Obstetrics and Gynecology Clinic, Assoc. Prof. MD., Izmir

Erkin SERDAROĞLU

University of Health Sciences Dr Behcet Uz Health Application and Research Center, Pediatric Nephrology Clinic, Prof. MD., Izmir

Sevil SAYHAN

University of Health Sciences Tepecik Health Application and Research Center, Medical Pathology Clinic, Assoc. Prof. MD., Izmir

Caroline SEWRY

UCL Queen Square Institute of Neurology, Prof. MD., United Kingdom

Suheyra SÜRÜCÜOĞLU

Celal Bayar University Faculty of Medicine, Department of Medical Microbiology, Prof. MD., Manisa

Aydın ŞENCAN

Celal Bayar University, Faculty of Medicine, Department of Pediatric Surgery, Prof. MD., Manisa

Erkan ŞENGÜL

University of Health Sciences Derince Health Application and Research Center, Nephrology Clinic, Assoc. Prof. MD., Kocaeli

Mehmet ŞENES

University of Health Sciences Ankara Health Application and Research Center, Medical Biochemistry Clinic, Assoc. Prof. MD., Ankara

Mehmet TANRISEV

University of Health Sciences Tepecik Health Application and Research Center, Nephrology Clinic, Assoc. Prof. MD. Izmir

Ercüment TARCAN

Izmir Ataturk Training and Research Hospital, General Surgery Clinic, Assoc. Prof. MD., Izmir

Ali TAYLAN

University of Health Sciences Tepecik Health Application and Research Center, Rheumatology Clinic, Assoc. Prof. MD., Izmir

Hasan TEKĞÜL

Ege University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology, Prof. MD., Izmir

Hasan TEZER

Pediatric Infectious Diseases, Private, Prof. MD., Ankara

Dilek TOPRAK

Namık Kemal University Faculty of Medicine, Department of Family Medicine, Prof. MD., Tekirdag

Tuba TUNCEL

Katip Çelebi University Faculty of Medicine, Department of Pediatrics, Assoc. Prof. MD., Izmir

Ayşen TÜREDİ

Celal Bayar University Faculty of Medicine, Department of Pediatrics, Assoc. Prof. MD., Manisa

Meltem UYAR

Ege University Faculty of Medicine, Department of Algology, Prof. MD., Izmir

Nurettin ÜNAL

Dokuz Eylül University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Cardiology, Prof. MD., Izmir

Aycan ÜNALP

University of Health Sciences Dr Behcet Uz Health Application and Research Center, Children's Neurology Clinic, Prof. MD., Izmir

Canan VERGİN

University of Health Sciences Dr Behcet Uz Health Application and Research Center, Pediatric Hematology and Oncology Clinic, Assoc. Prof. MD., Izmir

Raşit Vural YAĞCI

Ege University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Gastroenterology and Hepatology, Prof. MD., Izmir

Mehmet YALAZ

Ege University Faculty of Medicine, Department of Pediatrics, Prof. MD., Izmir

Önder YAVAŞCAN

Medipol University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Nephrology, Prof. MD., Istanbul

Mehmet YILDIRIM

University of Health Sciences Bozyaka Health Application and Research Center, General Surgery Clinic, Assoc. Prof. MD., Izmir

Dilek YILMAZ ÇİFTDOĞAN

University of Health Sciences Tepecik Health Application and Research Center, Pediatric Infectious Diseases Clinic, Prof. MD., Izmir

İsmail YILMAZ

Izmir Katip Çelebi University Faculty of Medicine, Department of Medical Pharmacology, Assoc. Prof. MD., Izmir

Orhan YILMAZ

University of Health Sciences Diskapi Yildirim Beyazit Health Application and Research Center, Otorhinolaryngology Clinic, Assoc. Prof. MD., Ankara

Murat Muhtar YILMAZER

University of Health Sciences Dr Behcet Uz Health Application and Research Center, Pediatrics Clinic, Assoc. Prof. MD., Izmir

Seyran YİĞİT

Izmir Ataturk Training and Research Hospital, Medical Pathology Clinic, Assoc. Prof. MD., Izmir

Arif YÜKSEL

University of Health Sciences Bozyaka Health Application and Research Center, Internal Medicine Clinic, Assoc. Prof. MD., Izmir