Official Journal of Turkish Society of Magnetic Resonance

# CRIMBI

Current Research in MRI

Pediatric Morel-Lavellée Lesions
Fatihoğlu and Kadirhan

Histopathological Correlation of MpMRI and PIRADS Scores in Prostate Cancer
Tonkaz and Şenbil

The Correlation between Diffusion Tensor Imaging-Histopathological Findings of Meningioma Alkan et al.





# Current Research in MRI



# **Editor in Chief**

Mecit Kantarcı 🕒



Department of Radiology, Erzincan Binali Yıldırım University, Faculty of Medicine; Atatürk University, Faculty of Medicine, Erzincan, Erzurum, Turkey

### **Editors**

### Abdominal Radiology

Aytekin Oto 🕒

The University of Chicago, Department of Radiology, Chief Physician, Head of the Faculty Practice Plan and Dean for Clinical Affairs, Chicago, USA

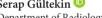
Murat Danacı 匝



Department of Radiology, Ondokuz Mayıs University, Faculty of Medicine, Samsun, Turkey

#### Breast Radiology

Serap Gültekin 🕛



Department of Radiology, Gazi University, Faculty of Medicine, Ankara, Turkey

### Cardiac Radiology

Memduh Dursun 匝



Department of Radiology, İstanbul University, İstanbul Faculty of Medicine, İstanbul, Turkey

Cihan Duran 🕑



Department of Diagnostic and Interventional Imaging, The University of Texas, McGovern Medical School, Texas, USA

# **Emergency Radiology**

Mehmet Ruhi Onur 🗓



Department of Radiology, Hacettepe University Faculty of Medicine Hospital, Ankara, Turkey

### **Engineer Group**

Esin Öztürk Işık 匝

Biomedical Engineering, Boğaziçi University, İstanbul, Turkey

### **Head & Neck Radiology**

Nafi Avgün 🕒

Department of Radiology, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

Hatice Gül Hatipoğlu 🕒



Department of Radiology, Health Science University, Gulhane Faculty of Medicine, Ankara Bilkent City Hospital, Ankara, Turkey

### Musculoskeletal Radiology

Nil Tokgöz 🕒



Department of Radiology, Gazi University, Faculty of Medicine, Ankara, Turkey

# Neuroradiology Radiology

Alpay Alkan 🗓



Department of Radiology, Bezmialem Vakıf University, Faculty of Medicine, İstanbul, Turkey

### Pediatric Radiology

Korgün Koral 匝



Department of Radiology, University of Texas Southwestern Medical Center, Dallas, TX, USA

Süreyya Burcu Görkem 🕩

Department of Pediatric Radiology, Adana State Hospital, Adana, Turkey

# Thorax Radiology

Polat Kosucu



Department of Radiology, Karadeniz Teknik University, Faculty of Medicine, Trabzon, Turkey

# **Biostatistical Consultant**

Sonav Aydın 🕛



Department of Radiology, Erzincan Binali Yıldırım University, Faculty of Medicine, Erzincan, Turkey

Türk Manteyik Rezonans Derneği adına sahibi / Owner: Abdülmecit Kantarcı • Sorumlu Yazı İşleri Müdürü / Responsible Manager on behalf of the Turkish Society of Magnetic Resonance: Sonay Aydın • Yayın türü / Publication Type: Yerel süreli / Local periodical • Basım yeri / Printed at: Kaya Ozalit, Meclis-i Mebusan cad. Mimar Han No:75/A 34427 Fındıklı İstanbul, Turkey (+90 212 243 81 05) • Basım tarihi / Printing Date: Nisan 2022 / April 2022 • Türk Manteyik Rezonans Derneği tarafından yayınlanmaktadır / Published by Turkish Society of Magnetic Resonance, Konak Mah. 858. Sok. No:2 Çakıroğlu İş Hanı Kat:5 Daire:55 Konak / İzmir (+90 232 446 75 96)



**Founder** İbrahim KARA

**General Manager** Ali SAHİN

**Publishing Directors** İrem SOYSAL Gökhan CIMEN

**Editor** Bahar ALBAYRAK

**Publications Coordinators** Arzu ARI Deniz KAYA Irmak BERBEROĞLU Alara ERGIN Hira Gizem FIDAN **Vuslat TAŞ** İrem ÖZMEN

**Web Coordinators** Sinem Fehime KOZ Doğan ORUÇ

**Finance Coordinator** Elif YILDIZ ÇELIK

Address: Büyükdere Cad. No: 105/9 34394 Mecidiyeköy, Şişli-İstanbul Phone: +90 212 217 17 00 E-mail: info@avesyayincilik.com

# Current Research in MRI



### AIMS AND SCOPE

Current Research in MRI (Curr Res MRI) is a scientific, open access, online-only official publication of the Turkish Society of Magnetic Resonance published in accordance with independent, unbiased, and double-blinded peer-review principles. The journal is published triannually in April, August, and December. The publication language of the journal is English.

Current Research in MRI aims to contribute to the literature by publishing manuscripts at the highest scientific level on radiology. The journal publishes original articles, reviews, case reports, and letters to the editor that are prepared in accordance with ethical guidelines.

The target audience of the journal includes specialists, researchers and professionals who working and interested in the field of radiology.

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).

### **Publication Fee Policy**

All expenses of the journal are covered by the Turkish Society of Magnetic Resonance. Processing and publication are free of charge with the journal. No fees are requested from the authors at any point throughout the evaluation and publication process. All manuscripts must be submitted via the online submission system, which is available at http://curremr.com. The journal guidelines, technical information, and the required forms are available on the journal's web page.

### **Advertisement Policy**

Current Research in MRI can publish advertisement images in the journal's website upon the approval of the Editor in

Chief. Potential advertisers should contact the Editorial Office. Advertisers have no effect on the editorial decisions or advertising policies.

### Disclaimer

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

### **Open Access Statement**

Current Research in MRI is an open access publication, and the journal's publication model is based on Budapest Access Initiative (BOAI) declaration. All published content is available online, free of charge at http://curremr.com. The journal's content is licensed under a Creative Commons Attribution-NonCommercial (CC BY-NC) 4.0 International License which permits third parties to share and adapt the content for non-commercial purposes by giving the appropriate credit to the original work.

You can reach the current version of the instructions to authors at https://curremr.com/EN

### Editor in Chief: Mecit Kantarcı

Address: Department of Radiology, Erzincan Binali Yıldırım University School of Medicine, Erzincan, Turkey E-mail: akkanrad@hotmail.com

# Publisher: Turkish Society of Magnetic Resonance

Address: Konak Mah. 858. Sok. No: 2 Çakıroğlu İş Hanı Kat: 5 Daire: 55 Konak / İzmir, Turkey

### **Publishing Service: AVES**

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

Phone: +90 212 217 17 00 E-mail: info@avesyayincilik.com Webpage: www.avesyayincilik.com

# Current Research in MRI



# **CONTENTS**

### **REVIEW ARTICLE**

A Review on the Medical Applications of Functional Magnetic Resonance Imaging
Bhagyalakshmi Akkavil Thondikandi, Arun Krishnan MP

### **ORIGINAL ARTICLES**

- 6 Magnetic Resonance Imaging Findings of Lower Extremity Morel-Lavellée Lesions in Pediatric Patients: A Preliminary Study Erdem Fatihoğlu, Özlem Kadirhan
- Histopathological Correlation of Current Prostate Imaging Reporting and Data System Scores with 3 Tesla Multiparametric Prostate Magnetic Resonance Imaging in Detecting Prostate Cancer Gökhan Tonkaz, Düzgün Can Şenbil
- Investigation of the Correlation Between Preoperative Diffusion Tensor Imaging Parameters and Histopathological Findings in Patients with Meningioma
  Enes Oğuzhan Alkan, Lutfullah Sarı, Serdar Balsak, Fatma Çelik Yabul, Fazılhan Altıntaş, Ganime Çoban

### **CASE REPORTS**

- 18 Partially Unroofed Coronary Sinus Jessi Cai, Cihan Duran
- 21 Sphenoidal Ectopic Adenohypophysis: A Rare Case Report and Literature Review İbrahim Feyyaz Naldemir, Ahmet Kürşat Karaman, Derya Güçlü