

Volume 19 • Issue 3 • May–June 2013

ISSN 1305-3825

# Diagnostic and Interventional Radiology

*Official Journal of the Turkish Society of Radiology*



TURKISH SOCIETY OF RADIOLOGY

*Electronic publication ahead of print available at*

[www.dirjournal.org](http://www.dirjournal.org)

**Editor in Chief**

Nevzat Karabulut, MD  
Denizli, Turkey

**Section Editors and Editorial Board**

**Abdominal Imaging**

Mustafa N. Özmen, MD  
Mustafa Seçil, MD

**Breast & Musculoskeletal Imaging**

Ayşenur Oktay, MD

**Cardiovascular Imaging**

Mecit Kantarcı, MD

**Chest Imaging**

Nevzat Karabulut, MD

**General Radiology**

Utku Şenol, MD

**Interventional Radiology**

Cüneyt Aytekin, MD  
Levent Oğuzkurt, MD  
Bora Peynircioğlu, MD

**Neuroradiology and  
Head & Neck Imaging**

Kubilay Aydın, MD  
Süleyman Men, MD  
Kader Karlı Oğuz, MD

**Nuclear Medicine**

Akın Yıldız, MD

**Pediatric Imaging**

Suat Fitöz, MD

**Biostatistical Consultant**

İlker Ercan, PhD

**Publication Staff**

**Graphic Design**

Üstün Aydıngöz, MD

**Copyediting**

Edita Ltd., Ankara, Turkey  
[www.editawriting.com](http://www.editawriting.com)

**Publication Services**

AVES Ltd., İstanbul, Turkey  
[www.avesyayincilik.com](http://www.avesyayincilik.com)

**Internet Services**

DDesign Ltd., İstanbul, Turkey  
[www.ddesign.com.tr](http://www.ddesign.com.tr)

**Contact Information**

Diagnostic and Interventional Radiology

Turkish Society of Radiology

Hoşdere Cad., Güzelkent Sok., Çankaya Evleri, F/2, 06540 Ankara, Turkey

E-mail [info@dirjournal.org](mailto:info@dirjournal.org)

Phone +90-312-4423653 Fax +90-312-4423654

Diagnostic and Interventional Radiology is published bimonthly by the Turkish Society of Radiology. It is peer-reviewed and adheres to the highest ethical and editorial standards. The editors of the journal endorse the Editorial Policy Statements Approved by the Council of Science Editors Board of Directors ([www.councilscienceeditors.org/services/draft\\_approved.cfm](http://www.councilscienceeditors.org/services/draft_approved.cfm)). The journal is in compliance with the Uniform Requirements for Manuscripts Submitted to Biomedical Journals published by the International Committee of Medical Journal Editors (updated April 2010, [www.icmje.org](http://www.icmje.org)).

An electronic edition of Diagnostic and Interventional Radiology is available at [www.dirjournal.org](http://www.dirjournal.org) (ISSN 1305-3612).

First ten volumes of Diagnostic and Interventional Radiology have been published in Turkish under the name of Tanısal ve Girişimsel Radyoloji (Index Medicus® abbreviation: Tani Girisim Radyol), the current title's exact Turkish translation.

© All rights of the articles published in Diagnostic and Interventional Radiology and displayed online at [www.dirjournal.org](http://www.dirjournal.org) are reserved by the Turkish Society of Radiology.

Diagnostic and Interventional Radiology is indexed in Science Citation Index Expanded, Index Medicus®, EMBASE®, SCOPUS®, Directory of Open Access Journals ([www.doaj.org](http://www.doaj.org)) and the Turkish Medical Index.

Printed in Turkey

Printed on acid-free paper



## Instructions for Authors

Manuscript submission is online at [www.dirjournal.org](http://www.dirjournal.org). Please refer to the detailed Instructions for Authors at [www.dirjournal.org](http://www.dirjournal.org) and use them as a checklist.

## Online manuscript submission

Carefully read the Instructions for Authors to the left. Go to the *Diagnostic and Interventional Radiology* website at [www.dirjournal.org](http://www.dirjournal.org).

Click Online Manuscript Submission.

If you are a registered user, enter your username and password. If you are not, register by clicking New User. Fill in the form and click Send. Define your username and password. When Author Center opens, enter New Submission. From this point on, follow the steps by clicking on the Next button. Select manuscript category (neuroradiology, abdominal imaging, etc.) and type (original article, review, etc.).

Enter affiliation, city, and country data (do not abbreviate institutional names). Enter author data. Full names of the authors should be given, an e-mail address must be provided, and corresponding author should be identified.

Enter the manuscript title.

Enter the abstract (it should be structured in all Manuscripts, except letter, review, technical note, and pictorial essay).

Enter the key words.

Enter a cover letter.

Upload your manuscript in the following manner:

Name your manuscript, which must be a Word document, as "text". This document should contain, in an orderly fashion, the main text (without any author or affiliation information), references, tables on separate pages, and figure legends. Search for your manuscript document by using the Browse button. After selecting the document, click the Upload button. Upload the figures. Every figure part should be properly named as separate files (e.g., "Figure\_1a"), browsed as explained above, and separately uploaded. Drawings and graphs are regarded as figures.

After all has been uploaded, click the Send Manuscript button. If you do not click this button, you may visit later to complete the manuscript submission. Your incomplete submission will be saved for later completion.

Do not forget to sign the Copyright Transfer Form (accessible at [www.dirjournal.org](http://www.dirjournal.org)) and e-mail ([info@dirjournal.org](mailto:info@dirjournal.org)) a scanned version of the signed form once your submission is provisionally accepted. Acceptance of your submission will be pending the receipt of the Copyright Transfer Form, and your manuscript will not be published online or in print form unless the Copyright Transfer Form is received.

stored in EPS format; the EPS file must always contain a preview of the figure in TIFF. Suitable drawing programs include Freehand, Illustrator, Corel Draw, and Designer.

This journal is in compliance with the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, as published by the International Committee of Medical Journal Editors (updated April 2010, [www.icmje.org](http://www.icmje.org)).

### Scope

*Diagnostic and Interventional Radiology* is a medium for disseminating scientific information based on research, clinical experience, and observations pertaining to diagnostic and interventional radiology.

• This journal is in compliance with the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, as published by the International Committee of Medical Journal Editors (updated April 2010, [www.icmje.org](http://www.icmje.org)). Any clinical trials must be registered as outlined in the ICMJE guidelines.

• For studies reporting diagnostic accuracy, please refer to the Standards for Reporting of Diagnostic Accuracy (STARD) checklist at <http://www.stard-statement.org/>.

The author(s) MUST sign, scan and e-mail the Copyright Transfer Form within three days AFTER their manuscript's acceptance for publication ([info@dirjournal.org](mailto:info@dirjournal.org)). Otherwise online or print publication will not be made.

Fax +90-312-4423654

### Form of manuscript

Papers must be in English and presented in the following order:

- Title of the manuscript
- Abstract (250 words or less, structured for original articles)
- Text of paper
- Acknowledgements
- Conflict of interest disclosure
- References
- Tables (numbered with Arabic numerals; 1, 2, 3, etc.), prepared on separate sheets
- Figure legends (numbered consecutively using Arabic numerals)

Please use appropriate subheadings and arrange your text as follows:

### Abstract

The abstract should contain four sections (for original articles only): Purpose; Materials and Methods; Results; Conclusion. Each section should comprise one paragraph, beginning with the name of the section in uppercase letters, followed by a colon: (PURPOSE: To report examples of ...)

### Introduction

State briefly the nature and purpose of the work, quoting the relevant literature.

### Materials and methods

Include the details of clinical and technical procedures.

### Research ethics standards compliance

All manuscripts dealing with human subjects must contain a statement indicating that the study was approved by the Institutional Review

Board or comparable formal research ethics review committee. If none is present at your institution, there should be a statement that the research was performed according to the Declaration of Helsinki principles ([www.wma.net/e/policy/b3.htm](http://www.wma.net/e/policy/b3.htm)). There should also be a statement about whether informed consent was obtained from research subjects.

### Results

Present these clearly, concisely, and without comment.

### Discussion

Explain your results and relate them to those of other authors; define their significance for clinical practice.

### References

Only essential references should be cited. If there are six or fewer authors, all should be listed. If there are seven or more, list the first three and then "et al." the rest. The list should be in order of first appearance in the text. Only numerals should be cited in the text. Journal names should be abbreviated according to MEDLINE (<http://www.ncbi.nlm.nih.gov/journals?itool=sidebar>).

### Journal article

1. Hoverman IV, Gentry LO, Jones DW, Guerriero WG. Intrarenal abscess: Report of 14 cases. *Arch Int Med* 1980; 140:914–916.

### Books

2. Watanabe M, Takeda S, Ikeuchi H. Atlas of arthroscopy. 2nd ed. Tokyo: Igaku Shoin, 1969; 57–59.
3. Hull RD, Hirsh J. Comparative value of tests for the diagnosis of venous thrombosis. In: Bernstein EF, ed. Noninvasive diagnostic techniques in vascular disease. 3rd ed. St. Louis: Mosby, 1985; 779–796.

### Tables

Tables should have a title and footnotes explaining any abbreviation used in that table. Lowercase letters (a, b, c, ...) should be used for referenced footnotes.

### Figures

All figures should be cited in the text and figure parts should be identified by lowercase letters (e.g., Figure 1a). Graphs and drawings are regarded as figures.

### Electronic formats

**Scan resolution:** Scanned line drawings should be digitized with a minimum resolution of 800 dpi relative to the final figure size. For digital halftones, 300 dpi is usually sufficient.

**Color illustrations:** Store color illustrations as RGB (8 bits per channel) in TIF format.

**Vector graphics:** Fonts used in vector graphics must be included. Do not draw with hairlines. The minimum line width is 0.2 mm (i.e., 0.567 pt) relative to the final size. Vector graphics exported from a drawing program should be

## Contents

### NEURORADIOLOGY

- 181 Original article. **Tract-based spatial statistics of diffusion tensor imaging in hereditary spastic paraplegia with thin corpus callosum reveals widespread white matter changes.** *K. Karlı Oğuz, E. Şanverdi, A. Has, Ç. Temuçin, S. Türk, K. Doerschner*
- 187 Case report. **Gadolinium leakage into subarachnoid space and cystic metastases.** *A. E. Yıldız, E. Atlı, K. Karlı Oğuz*
- 191 Case report. **Mitochondrial neurogastrointestinal encephalomyopathy: imaging and clinical findings in three patients.** *G. Çoban, S. Göktürk, E. Yıldırım, Z. Çalışkan, B. Horasanlı, H. A. Akça*

### HEAD AND NECK IMAGING

- 195 Pictorial essay. **The many faces of fungal disease of the paranasal sinuses: CT and MRI findings.** *M. Mossa-Basha, A. T. Ilica, F. Maluf, Ö. Karakoç, İ. İzbudak, N. Aygün*

### CHEST IMAGING

- 201 Original article. **Radiation dose management in thoracic CT: an international survey.** *F. Molinari, D. M. Tack, P. Boiselle, L. Ngo, C. Mueller-Mang, D. Litmanovich, A. A. Bankier*
- 208 Original article. **Poststernotomy lymphadenopathy: prevalence, size, and location on chest CT.** *C. J. McCarthy, A. C. O'Neill, S. H. McEvoy, A. Kilcoyne, M. W. Butler, M. P. Keane, J. D. Dodd*

### CARDIOVASCULAR IMAGING

- 213 Original article. **Left atrial volume quantification using cardiac MRI in atrial fibrillation: comparison of the Simpson's method with biplane area-length, ellipse, and three-dimensional methods.** *M. S. Nacif, A. D. Barranhas, E. Türkbey, E. Marchiori, N. Kawel, R. A. F. Mello, R. O. Falcão, A. C. Oliveira Jr, C. E. Rochitte*

### BREAST IMAGING

- 221 Original article. **Single voxel in vivo proton magnetic resonance spectroscopy of breast lesions: experience in 77 cases.** *İ. Başara, Ş. Örgüç, T. Coşkun*

### ABDOMINAL IMAGING

- 227 Original article. **MRI in the diagnosis of Mayer-Rokitansky-Kuster-Hauser syndrome.** *T. Kara, B. Acu, M. Beyhan, E. Gökçe*

### MUSCULOSKELETAL IMAGING

- 233 Case report. **Isolated vertebral metastasis with a fluid-fluid level from a poorly differentiated adenocarcinoma.** *M. Jarraya, D. Hayashi, C. Lebreton, J. F. Côté, A. Guermazi, C. Vallée*
- 237 Case report. **Fluid rim sign: a new ultrasonographic sign of soft tissue aspergillosis.** *E. Akpınar, V. A. Ayyıldız, İ. Petekkaya, B. Erbil, V. Dogra*

### PEDIATRIC RADIOLOGY

- 240 Case report. **Proteus syndrome: a case report with bone scintigraphy findings.** *B. C. Khangembam, S. Karunanithi, P. Sharma, K. K. Agarwal, A. Singhal, V. S. Dhull, C. Bal, R. Kumar*

### INTERVENTIONAL RADIOLOGY

- 244 Original article. **Reduction of iodinated contrast load with the renal artery catheterization technique during endovascular aortic repair.** *M. Canyığıt, L. Çetin, E. Uğuz, O. Algin, A. Küçükler, H. Arslan, E. Şener*
- 251 Original article. **US-accelerated catheter-directed thrombolysis for the treatment of deep venous thrombosis.** *M. Dumantepe, A. Tarhan, İ. Yurdakul, A. Özler*
- 259 Case report. **Occlusion of a neo-esophageal-bronchial fistula using the Amplatzer Vascular Plug 2.** *J. A. Young, S. M. Shimi, A. Alijani, P. V. Patil, R. Bhat*

### LETTER TO THE EDITOR

- 263 **Intrathoracic gossypiboma: a diagnostic challenge.** *İ. Özeydin, M. Elmalı, B. Çelik, D. Kocabağcak*

*Please sign this form and e-mail (info@dirjournal.org) a scanned version of the signed form ONLY AFTER your submission is accepted. Your submission will not be published online or in print form unless this form is received.*

*This form can be downloaded at [www.dirjournal.org](http://www.dirjournal.org)*

Complete copyright to the article entitled:

---

(hereinafter, "the article") is hereby transferred to the Turkish Society of Radiology (for United States government employees to the extent transferable), effective if and when the article is accepted for publication in Diagnostic and Interventional Radiology.

The copyright which the authors assign to the Turkish Society of Radiology encompasses all rights to exploit the article in any manner throughout the world. These rights include, but are not limited to, all print reproduction and publication rights and electronic publication rights, such as CD-ROM and online publication, as well as dissemination by any technology now known or later devised.

The author(s) retain all patent and other proprietary rights to the article, with exception of the copyright. If an author wishes to reproduce the article in any medium for distribution purposes, the author must obtain permission from the Turkish Society of Radiology and, if permission is granted, the author must credit the original source of publication when the article is reproduced.

The author(s) certify that:

1. The article does not infringe any personal or proprietary rights of others;
2. The editor-in-chief of Diagnostic and Interventional Radiology has been or will be informed of any proprietary or commercial interest or conflicts of interest the authors may have that relate directly or indirectly to the subject of this article;
3. The scientific content of radiologic images has not been altered, and that disclosure has been made regarding computer enhancement or other electronic manipulation of radiologic images;
4. The authors have made substantive and specific intellectual contributions to this article and assume full responsibility for its content;
5. This article has not been previously published and is not currently under consideration for publication elsewhere; and
6. This agreement has been signed by all of the authors who contributed to the article.

First author's name	Signature	Date
Second author's name	Signature	Date
Third author's name	Signature	Date
Fourth author's name	Signature	Date
Fifth author's name	Signature	Date
Sixth author's name	Signature	Date
Seventh author's name	Signature	Date

*Please use additional sheets for more authors.*