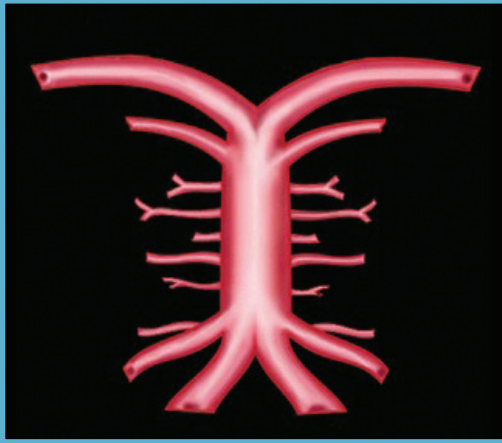


Turkish Neurosurgery

Official Journal of the Turkish Neurosurgical Society



Management of Postoperative Spondylodiscitis with and without Internal Fixation

Preventive Role of Hilar Parasympathetic Ganglia on Pulmonary Artery Vasospasm in Subarachnoid Hemorrhage: An Experimental Study

Endovascular Management of Superior Cerebellar Artery Aneurysms: Mid and Long-Term Results

The Comparison of Pullout Strengths of Various Pedicle Screw Designs on Synthetic Foams and Ovine Vertebrae



Microsurgical Anatomy of the Labyrinthine Artery and Clinical Relevance

Effects of Intensive Blood Pressure Lowering on Intracerebral Hemorrhage Outcomes: A Meta-Analysis of Randomized Controlled Trials

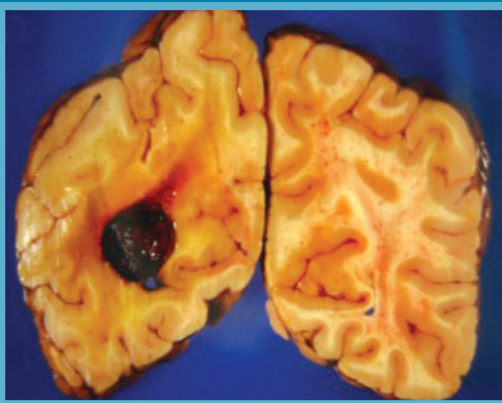
Neuroprotective Effects of Erythropoietin in Patients with Severe Closed Brain Injury

Feasibility of Screw Placement in the Occipital Condyle of Chinese Patients for Occipitocervical Arthrodesis: A Cadaveric Study

Morphometric Analysis of the Sacral Canal and Hiatus Using Multidetector Computed Tomography for Interventional Procedures

Expression of Stem Cell Marker Nestin and MicroRNA-21 in Meningiomas

Effect of Posterior Dynamic Instrumentation on High-Intensity Zone in Lumbar Degenerative Disc Disease





Turkish Neurosurgery

Official Journal of the Turkish Neurosurgical Society

TURKISH NEUROSURGICAL SOCIETY

Volume: 25 Number: 4 Year: 2015

www.turkishneurosurgery.org.tr

PRESIDENTS

Nurhan Avman	1985-1986
Aykut Erbenği	1986-1987
Özdemir Gürçay	1988-1988
Tunçalp Özgen	1988-1989
Yücel Kanpolat	1989-1990
Osman E. Özcan	1990-1992
Ertekin Arasil	1992-1993
Yamaç Taşkın	1993-1995
Yücel Kanpolat	1995-1996
Nur Altınörs	1996-1997
M. Kemal Baykaner	1997-1998
Kaya Aksoy	1998-2000
Necmettin Pamir	2000-2002
Nurcan Özdamar	2002-2004
Selçuk Palaoğlu	2004-2006
Mehmet Zileli	2006-2008
Ethem Beşkonaklı	2008-2010
Murad Bavbek	2010-2012
Uğur Türe	2012-2014
Zeki Şekerci	2014-

EDITORS

Tunçalp Özgen	1989-1989
Yücel Kanpolat	1989-1990
Osman E. Özcan	1990-1992
Selçuk Palaoğlu	1992-1994
Nur Altınörs	1994-1995
Selçuk Palaoğlu	1995-1996
Zafer Kars	1996-1998
Kaya Aksoy	1998-2000
Murad Bavbek	2000-2003
Erdener Timurkaynak	2003-2004
Kemal Benli	2004-2006
Hakan Caner	2007-2013
Deniz Belen	2014-2015
Talat Kırış	2015-

Turkish Neurosurgery has been accepted
for indexing in:

SCIENCE CITATION INDEX EXPANDED
INDEX MEDICUS, MEDLINE, PubMed,
Scopus

Impact Factor* : 0.576
5yr-Impact Factor* : 0.702

*ISI Web of KnowledgeSM, Journal Citation
Reports®, 2014 JCR Science Edition

Editor-in-Chief:

Talat Kırış : turkishneurosurgery@gmail.com

Editor:

Cem Yılmaz : cemerimiyilmaz@gmail.com

Editors of Sections:

Dattatraya Muzumdar (Editor of Neurooncology Section)	: dmuzumdar@hotmail.com
Hidenori Kobayashi (Editor of Cerebrovascular Section)	: hidek-fchs@kbh.biglobe.ne.jp
M. Kemal Baykaner (Editor of Pediatric Neurosurgery Section)	: baykaner@yahoo.com
R. Kemal Koç (Editor of Spinal Surgery Section)	: kocrk@erciyes.edu.tr
Klaus Von Wild (Editor of Neurotrauma Section)	: kvw@neurosci.de
Selçuk Peker (Editor of Stereotactic and Functional Section)	: selcuk@selcukpeker.com

Associate Editors:

Selim Ayhan : selim_ayhan@yahoo.com	Yusuf İzci : yizci@gata.edu.tr
Denizhan Divanlıoğlu : ddivanlioglu@gmail.com	Hakan Karabağlı : hakankarabagli@yahoo.com
Hakan Emmez : hakanemmez@gmail.com	Hayri Kertmen : hayri_kertmen@yahoo.com
Salih Gülşen : salihgulsen07@gmail.com	Ali Erdem Yıldırım : alierdemyildirim@gmail.com

ADVISORY BOARD

Feridun Acar, <i>Turkey</i>	Ziya Gökaslan, <i>USA</i>	Guilherme Carvalhal Ribas, <i>Brasil</i>
Gokhan Akdemir, <i>Turkey</i>	Murat Günel, <i>USA</i>	Concezio Di Rocco, <i>Italy</i>
Nejat Akalan, <i>Turkey</i>	Murat Hancı, <i>Turkey</i>	James T. Rutka, <i>Canada</i>
Ossama Al-Mefty, <i>USA</i>	Juha Hernesniemi, <i>Finland</i>	Burak Sade, <i>Turkey</i>
Nur Altınörs, <i>Turkey</i>	Servet İnci, <i>Turkey</i>	Majid Samii, <i>Germany</i>
Nuri Arda, <i>Turkey</i>	Juha E Jääskeläinen, <i>Finland</i>	Ali Savaş, <i>Turkey</i>
Ali Arslantaş, <i>Turkey</i>	Erkan Kaptanoğlu, <i>Turkey</i>	Daniel Sciubba, <i>USA</i>
Emel Avcı, <i>Turkey</i>	Feyza Karagöz Güzey, <i>Turkey</i>	Laligam Sekhar, <i>USA</i>
Şükrü Aykol, <i>Turkey</i>	Takesi Kawase, <i>Japan</i>	Nathan Selden, <i>USA</i>
Mustafa K. Başkaya, <i>USA</i>	Andrew H. Kaye, <i>Australia</i>	İhsan Solaroğlu, <i>Turkey</i>
Murad Bavbek, <i>Turkey</i>	Memduh Kaymaz, <i>Turkey</i>	Robert F. Spetzler, <i>USA</i>
Ahmet Bekar, <i>Turkey</i>	M. Yaşar Kaynar, <i>Turkey</i>	Alparslan Şenel, <i>Turkey</i>
Ahmet Deniz Belen, <i>Turkey</i>	Evren Keleş, <i>Turkey</i>	Sait Şirin, <i>Turkey</i>
Edward C. Benzel, <i>USA</i>	Kadir Kotil, <i>Turkey</i>	Necmettin Tanrıöver, <i>Turkey</i>
Mustafa Berker, <i>Turkey</i>	Basant Kumar Misra, <i>India</i>	Morcos Tatagiba, <i>Germany</i>
Ethem Beşkonaklı, <i>Turkey</i>	Boris Krischek, <i>Germany</i>	Nicolas De Tribolet, <i>Switzerland</i>
Luis Borba, <i>Brasil</i>	Ali Krisht, <i>USA</i>	Uğur Türe, <i>Turkey</i>
Kim Burchiel, <i>USA</i>	Jacques Morcos, <i>USA</i>	Tanju Uçar, <i>Turkey</i>
Paolo Capabianca, <i>Italy</i>	Melike Mut, <i>Turkey</i>	Ağahan Ünlü, <i>Turkey</i>
Fady Charbel, <i>USA</i>	Sait Naderi, <i>Turkey</i>	Peter Vajkoczy, <i>Germany</i>
Şükrü Çağlar, <i>Turkey</i>	Evandro de Oliveira, <i>Brasil</i>	M. Gazi Yaşargil, <i>USA</i>
Mehmet Daneyemez, <i>Turkey</i>	Kenji Ohata, <i>Japan</i>	Selçuk Yılmazlar, <i>Turkey</i>
Gilbert Deschambenoit, <i>France</i>	Nezih Oktar, <i>Turkey</i>	Mehmet Zileli, <i>Turkey</i>
İlhan Elmacı, <i>Turkey</i>	Selçuk Palaoğlu, <i>Turkey</i>	İbrahim M. Ziyal, <i>Turkey</i>
Micheal Fehlings, <i>Canada</i>	Necmettin Pamir, <i>Turkey</i>	
Atul Goel, <i>India</i>	Selçuk Peker, <i>Turkey</i>	

Redaction: Dr. Aydın Yuluğ, Aytaç Yıldızeli

Secretary: Mukadder Karakaya Çerçi, Nurhan Şen

Plagiarism: Hüseyin Körpeoğlu

Web site design: Pleksus Information Technology

Turkish Neurosurgery

Volume: 25 Number: 4 Year: 2015

Official Journal of the Turkish Neurosurgical Society

Turkish Neurosurgery is published six times per year by the Turkish Neurosurgical Society (January, March, May, July, September, and November)

Owned and controlled by the Turkish Neurosurgical Society

Copyright owner on behalf of the Turkish Neurosurgical Society:
Zeki ŞEKERCI

Publishing Manager:
Tanju UÇAR

Key title: Turkish Neurosurgery
Abbreviated key title: Turk Neurosurg
www.turkishneurosurgery.org.tr

ISSN: 1019-5149

NLM ID: 9423821

Subscription: Sent free to the Turkish Neurosurgical Society members.
Non-members should contact the Society for subscription.

Publishing Services

BULUŞ DESIGN AND PRINTING SERVICES COMPANY
Bahriye Üçok Caddesi 9/1 Beşevler, 06500 Ankara, Turkey
Phone: +90 312 222 44 06 Fax: +90 312 222 44 07
www.bulustasarim.com.tr

Printed at

Sonsöz Gazetecilik ve Matbaacılık Tic. Ltd. Şti.
Matbaacılar Sanayi Sitesi 35. Cadde, No: 56 İvedik, Ankara, Turkey
Phone: +90 312 394 57 71

This issue is published as: 1300 copies.

Printing Date: 30.07.2015

Cover picture: Gunnal, p. 591; Cabuk, p. 603; Zakaria, p. 644

Turkish Neurosurgical Society
Taşkent Caddesi 13/4 06500 Bahçelievler, Ankara/TURKEY
Phone: +90 312 212 64 08 Fax : +90 312 215 46 26
E-mail: info@turknorosirurji.org.tr
www.turknorosirurji.org.tr
www.turkishneurosurgery.org.tr

Review of the articles in the journal to make sure they conform to publishing standards, typesetting, the review of English abstract and sources, getting the journal ready for publication and finally the publishing process has been the responsibility of Buluş Design and Printing Services Company.

The paper used to print this journal conforms to ISO 9706: 1994 standard (Requirements for Permanence).
The National Library of Medicine suggests that biomedical publications be printed on acid-free paper (alkaline paper).



ENVIRONMENTAL INFORMATION

The company that manufactures the paper used in this journal has an ISO 14001 environmental management certificate. The company obtains all wood fiber in a sustainable manner. The forests and plantations of the company are certified. The water used in production is purified and used after recovery.

Heavy metals or film are not used for the publication of this journal. The fluids used for developing the aluminum printing templates are purified. The templates are recycled. The inks used for printing do not contain toxic heavy metals.

This journal can be recycled. Please dispose of it in recycling containers.

INSTRUCTION TO THE AUTHORS

Turkish Neurosurgery is a peer-reviewed, multidisciplinary journal directed at an audience of neurosurgery physicians and scientists. The official language of the journal is *English*. The journal publishes original articles in the form of clinical and basic research. *Turkish Neurosurgery* will only publish studies that have institutional review board (IRB) approval and have strictly observed a sufficient follow-up period. With the exception of reference presentation, *Turkish Neurosurgery* requires that all manuscripts be prepared in accordance with the *Uniform Requirements for Manuscripts Submitted to Biomedical Journals*.

Turkish Neurosurgery periodically publishes the following papers: TurkishNeuro-Excursion, Original Investigation (Clinical and Experimental Studies), Review Article, Article with Videoclip, Case Report, Case Illustration, Technical Note, Historical Perspective and Letter to the Editor.

Manuscript Submission

Authors are to submit their manuscripts through the Web-based tracking system at <http://www.turkishneurosurgery.org.tr>. The site contains instructions and advice on how to submit manuscripts, guidance on the creation/scanning and saving of electronic art, and supporting documentation. In addition to allowing authors to submit manuscripts on the web, the site allows authors to follow the progression of their manuscript through the peer review process. Authors who submit their manuscripts through the web-based tracking system are asked not to send hard copies of the manuscript to the editorial office. Please address all inquiries regarding manuscripts not yet accepted or published to the Journal's editorial office. The editorial office will acknowledge receipt of your manuscript and will send you a manuscript number for reference.

Revised Submission

Author's comments to the reviewers are required for revised submissions. Authors must address the reviewer's concerns/suggestions and whether the change was made or not. Authors must also highlight the changes made within the text. Do not track the additions or deletions to the manuscript. If the Authors do not want to revise the manuscript within a period of *two months* the manuscript will automatically be declined.

Patient anonymity and informed consent: It is the author's responsibility to ensure that a patient's anonymity is carefully protected and to verify that any experimental investigation with human subjects reported in the manuscript was performed with informed consent and followed all the guidelines for experimental studies with human subjects required by the institution(s) with which all the authors are affiliated. Authors should mask patients' eyes, private parts and remove patients' names from all figures.

Copyright: All authors must sign a copy of the Journal's "**Copyright Transfer/Conflict of Interest and Device Status Form**" and submit it to the Editorial Office if the manuscript is accepted for publication in Turkish Neurosurgery. The authors of all published material must sign this form at the time of manuscript acceptance.

Permissions: Authors must submit written permission from the copyright owner (usually the publisher) to use direct quotations, tables, or illustrations that have appeared in copyrighted form elsewhere, along with complete details about the source. Any permissions fees that might be required by the copyright owner are the responsibility of the authors requesting use of the borrowed material and not the Turkish Neurosurgical Society.

Preparation of Manuscript

Manuscripts that do not adhere to the following instructions WILL BE RETURNED to the corresponding author for technical revision before undergoing peer review.

General format: All manuscripts should be submitted in English, and formatted for standard 8 1/2 x 11-inch (21 x 28-cm) paper with at least a 1-inch (2.5 cm) margin on all sides and double-spaced.

Style: *Pattern manuscript style after the American Medical Association Manual of Style (9th edition), Stedman's Medical Dictionary (27th edition) and Merriam Webster's Collegiate Dictionary (10th edition)* should be used as standard references. Refer to drugs and therapeutic agents by their accepted generic or chemical names, and do not abbreviate them. Use code numbers only when a generic name is not yet available. In that case, supply the chemical name and a figure giving the chemical structure of the drug. Capitalize the trade names of drugs and place them in parentheses after the generic names. To comply with trademark law, include the name and location (city and state in USA; city and country outside USA) of the manufacturer of any drug, supply, or equipment mentioned in the manuscript. Use the metric system to express the units of measure and degrees Celsius to express temperatures, and SI units rather than conventional units.

Submit the manuscript electronically via:
<http://www.turkishneurosurgery.org.tr> in the following order:

- 1) **Title page:** The title page should include:
 - (a) complete manuscript title (brief, definite and didactic),
 - (b) authors' full names, highest academic degrees, and affiliations,
 - (c) name and address for correspondence, including fax number, telephone number, and e-mail address,

- (d) address for reprints if different from that of corresponding author,
- (e) sources of support that require acknowledgement,
- (f) any other acknowledgement the authors wish to include. Please verify that the spelling, order, and affiliation of each author are correct.
- (g) the title page must be uploaded as a separate file

The Journal is not responsible for published misspelled names due to author error.

A Running Head should also appear in the title page. The running head should be no more than three to five words from the title, and should NOT include the authors' names.

2) Structured Abstract and Key Words.

The following subheads must be included in the Structured Abstract *only for clinical and experimental research papers*: **Aim (Background), Material and Methods, Results, Conclusion.** Do not cite references in the abstract, and limit the use of abbreviations and acronyms. The structured abstract must be **no more than 250 words.**

List **three to eight Key Words** after the *abstract*.

Abbreviations should be written after the keywords in the abstract. Abbreviations should be written within parentheses after writing the abbreviated phrase in full in the first instance in the text. They should be written without parentheses afterwards. For a list of standard abbreviations, consult the Council of Biology Editors Style Guide (available from the Council of Science Editors, 9650 Rockville Pike, Bethesda, MD 20814) or other standard sources.

It is not necessary to provide a structured abstract for submissions to the Turkish Neuro-Excursion, Review Article, Case Report, Case Illustration, Technical Note, Historical Perspective and Letter to the Editor sections.

3) Text: Organize the manuscript into five main headings:

Introduction, Material and Methods, Results, Discussion, and Conclusion.

For Clinical Trials, Experimental and Anatomic Studies as well as similar study designs, *please attach the Ethical Committee Approval Form to the manuscript submission.*

Define abbreviations at first mention in text and in each table and figure. If a brand name is cited, supply the manufacturer's name and address (city and state/country).

The number of words varies for different types of manuscripts:

Turkish Neuro-Excursion: The editor will invite connoisseurs for these special type of papers which may cover a broad spectrum in various fields of medicine, science, art, history, law as well as any important theme on actuality other than core neurosurgery. The number of words, figures, tables and references are not restricted.

Original Investigation, Review, Article with Videoclip, and Historical Perspective: The main text should not exceed 3500 words excluding the abstract, references, tables, and figure legends for original articles, including randomized controlled trials, observational (cohort, case-control or cross-sectional) studies, diagnostic accuracy studies, systematic reviews and meta-analyses, nonrandomized behavioral and public health intervention trials, experimental animal trials, or any other retrospective or prospective clinical or experimental studies and invited articles. The number of figures, tables, videos and references are not restricted. The specifications for video files are given at part 6.

Case Report: Word count must not exceed 1000 (excluding references, tables, and figure legends). Case reports cannot have more than 4 authors, 15 references, and 4 figures or tables.

Case Illustration: The number of words must not exceed 500 (excluding references, tables, and figure legends). There is a restriction for only 2 figures and 10 references.

Technical Note: The number of words must not exceed 1000, and there should not be more than 4 authors or 15 references. The number of figures and tables are not restricted.

Letter to the Editor: These can also be submitted through Editorial Manager. Letters should refer to the title and authors of a recent *Turkish Neurosurgery* article. The letter should be no longer than 300 words with no more than 3 references. Unpublished data should not be used. Letters to the Editor are sent to the article authors for response. The Editor-in-Chief makes the final decision on whether letters to the editor and the responses are published.

Terms: Do not use the term hardware. Acceptable substitutions include implants and instrumentation. Constructs or montage may be used if the reference is to a particular pattern of fixation points for the instrumentation.

4) References:

The authors are responsible for the accuracy of the references. Key the references (double-spaced) at the end of the manuscript. Cite references in text in *alphabetical order within parentheses*. Do not link the references to the text. Cite unpublished data, such as papers submitted but not yet accepted for publication or personal communications, in parentheses in the text. List all the authors of the reference. Refer to the List of Journals Indexed in Index Medicus for abbreviations of journal names, or access the list at "<http://www.nlm.nih.gov/tsd/serials/lji.html>" Sample references are given below:

A. Journal article

Guiot BH, Khoo LT, Fessler RG: A minimally invasive technique for decompression of the lumbar spine. *Turkish Neurosurgery* 27: 432-438, 2002

B. Additional example

Altınörs N, Kars Z, Arda N, Şenveli E, Türker A, Çınar N: Spinal extradural metastasis of medulloblastoma. Turk Neurosurg Suppl 1: 144, 1989

C. Book chapter

Sweitzer S, Arruda J, DeLeo J: The cytokine challenge: Methods for the detection of central cytokines in rodent models of persistent pain. In: Kruger L (ed), Methods in Pain Research. Boca Raton, FL: CRC Press, 2001: 109-132

D. Entire book

Atlas SW: Magnetic Resonance Imaging of the Brain and Spine. Philadelphia: Lippincott Williams & Wilkins, 2001

E. Example of thesis

Kanpolat Y: Trigeminal ganglion deneyisel perkütan giriş ve radyofrekans termik lezyonun histopatolojik değerlendirilmesi (Doçentlik tezi), Ankara: Ankara Üniversitesi, 1978:1- 52

F. Software

Epi Info [computer program]. Version 6. Atlanta: Centers for Disease Control and Prevention, 1994

G. Online journals

Friedman SA. Preeclampsia: A review of the role of prostaglandins. Obstet Gynecol [serial online]. January 1988;71:22-37. Available from: BRS Information Technologies, McLean, VA. Accessed December 15, 1990

H. Database

CANCERNET-PDQ [database online]. Bethesda, MD: National Cancer Institute, 1996. Updated March 29, 1996

I. World Wide Web

Gostin LO. Drug use and HIV/AIDS [JAMA HIV/AIDS web site]. June 1, 1996. Available at: <http://www.ama-assn.org/special/hiv/ethics>. Accessed June 26, 1997

5) Tables and Figures:

Tables: Create tables in **word format** using the table creating and editing feature of your word processing software. Do not use Excel or comparable spreadsheet programs. **Tables should not exceed page width of 41 picas or 17.5 cm.** Supply tables together in a separate file. Cite tables consecutively in the text, and number them in that order. Key each on a separate sheet, include the table title, appropriate column heads, and explanatory legends (including definitions of any abbreviations used). **Do not embed tables within the body of the manuscript.** They should be self-explanatory and should supplement, rather than duplicate, the material in the text.

Digital Figures: All electronic art can be submitted through the Web-based tracking system "<http://www.turkishneurosurgery.org.tr>"

A. Format: Electronic art should be created/scanned and saved and submitted either as a **JPEG file**.

B. Sizing and Resolution:

Line art must have a resolution of at least 1200 dpi (dots per inch).

Electronic photographs, radiographs, CT scans, and scanned images must have a resolution of at least 300 dpi.

Figures should be sized to fit either 1 column (20 picas/8.4 cm), 1 1/2 columns (30 picas/12.65 cm OR 2 columns (41 picas/17.5 cm) on a page.

Sizing and Resolution can be checked through the related web-based programs or softwares.

C. Fonts: If fonts are used in the artwork, they must be converted to paths or outlines or they must be embedded in the files. Fonts must be 8 pt and be sized consistently throughout the artwork. The best font to use is Helvetica.

Figure legends: Legends must be submitted for all figures. They should be brief and specific and less than 150 characters or approximately 50 words. List figure legends on a separate page at the end of the manuscript text.

Color figures: The journal accepts color figures with free of charge which will enhance the quality of an article.

6) Videos:

Videos will be published as a part of "Article with Videoclip" manuscripts. Videoclips must be the property of author(s). The copyright issues are similar to the other parts of the Turkish Neurosurgery Journal that was aforementioned. These videoclips may replace of a figure or figures of an article. They must include an embedded audio narration and subtitles in English. The proper formats are .avi, .mpeg and .mp4. The file size is restricted to a maximum of 40 MB. The runtime should not be longer than 10 minutes. To upload a video more than mentioned size, please contact with the editorial office.

7) Research Reporting Guidelines:

The authors should consult the following guidelines* in accordance with the type of research.

- A. Consolidated Standards of Reporting Trials (CONSORT) for randomized trials.
- B. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) for systematic reviews and meta-analyses.
- C. Meta-Analysis of Observational Studies in Epidemiology (MOOSE) for observational studies of systematic reviews and meta-analyses.
- D. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) for observational articles.
- E. Standards for the Reporting of Diagnostic Accuracy Studies (STARD) for the studies of diagnostic accuracy.

*It is possible for the authors to reach these guidelines through internet.

8) Plagiarism:

Manuscripts are investigated for possible plagiarism once they are accepted for possible publication. If an author

receives a plagiarism notice regarding his/her manuscript, the corrections should be made within one month. If the Editorial Board detects any plagiarism on the second check after correction of the manuscript by the authors, the chief editor can reject the manuscript.

After Acceptance

Page proofs and corrections: Corresponding authors will receive electronic page proofs to check the copyedited and typeset article before publication. Portable document format (PDF) files of the typeset pages and support documents (e.g., reprint order form) will be sent to the corresponding author via e-mail. Complete instructions for downloading and printing the files and for faxing the corrected pages to the publisher will be provided with the e-mail. Authors without an e-mail address will receive traditional page proofs. It is the author's responsibility to ensure that there are no errors in the proofs. Changes that have been made to conform to journal style will stand if they do not alter the author's meaning. Only the most critical changes of the accuracy of the content will be made. Changes that are stylistic or are a reworking of previously accepted material will not be allowed. The publisher reserves the right to deny any changes that do not affect the accuracy

of the content. Authors may be charged for alterations to the proofs beyond those required to correct errors or to answer queries. Proofs must be checked carefully and corrections faxed within 24 to 72 hours of receipt, as requested in the cover letter accompanying the page proofs.

Publisher's contact details: Fax or e-mail corrected page proofs, and any other related materials to Journal Production Editor, Türk Nöroşirürji Derneği, Taşkent Caddesi 13/4, Bahçelievler-06500 Ankara, TURKEY.
Phone: +90 312 212 64 08 Fax: +90 312 215 46 26

Reprints: Reprint requests should be faxed or e-mailed with the corrected proofs by the corresponding author, if needed. Reprints are normally shipped 6 to 8 weeks after publication of the issue in which the item appears. Contact with the Publisher: Bulus Tasarım, Bahriye Üçok Caddesi 9/1, Beşevler, Ankara, TURKEY.
Phone: +90 312 222 44 06 Fax: +90 312 222 44 07
e-mail: bulus@bulustasarim.com.tr.

The price for 2 sets of Hardcopy journal + shipping is approximately* 100 TL (~35 EUR).

**Depend on shipping cost. Please contact Bulus Tasarım.*

Manuscript Checklist (before submission. For author reference only)

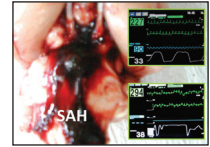
1. Title page
 - Title (brief, definite, didactic)
 - Corresponding author designated, and full mailing address included on title page
 - E-mail address of corresponding author included on title page
 - Running head
 - Permission to reproduce copyrighted materials or signed patient consent forms
 - Acknowledgements listed for grants, technical support, and corporate support on title page
2. Structured abstract with key words (250 words)
3. Manuscript text with page numbers (without author names and affiliations)
4. Figure legends
5. Tables (Word, Wordperfect)
6. Figures (jpeg)
7. Videos (avi, mpeg, mp4)
8. References double-spaced and cited in alphabetical order

REVIEW

- 513** **Management of Postoperative Spondylodiscitis with and without Internal Fixation**
İnternal Fiksasyon ile veya Olmadan Postoperatif Spondilodiskit Tedavisi
Xiang WANG, Hairong TAO, Yanhui ZHU, Xiongwei LU, Xiaopeng HU

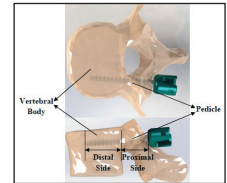
ORIGINAL INVESTIGATIONS

- 519** **Preventive Role of Hilar Parasympathetic Ganglia on Pulmonary Artery Vasospasm in Subarachnoid Hemorrhage: An Experimental Study**
Subaraknoid Kanamada Hilar Parasempatik Ganglionun Pulmoner Arter Vazospazmı Üzerindeki Önleyici Rolü: Deneysel Bir Çalışma
Omer ARAZ, Mehmet Dumlu AYDIN, Betül GUNDOGDU, Ender ALTAS, Murteza CAKIR, Cagatay CALIKOGLU, Canan ATALAY, Cemal GUNDOGDU



- 526** **Endovascular Management of Superior Cerebellar Artery Aneurysms: Mid and Long-Term Results**
Süperior Serebellar Arter Anevrizmalarında Endovasküler Tedavi: Orta ve Uzun Dönem Sonuçlar
Murat VELIOGLU, Hakan SELCUK, Osman KIZILKILIC, Cinar BASEKIM, Naci KOCER, Civan ISLAK

- 532** **The Comparison of Pullout Strengths of Various Pedicle Screw Designs on Synthetic Foams and Ovine Vertebrae**
Değişik Tipte Dizayn Edilmiş Pedikül Vidalarının Sentetik Köpük ve Koyun Omurgasında Sıyırılma Kuvvetlerinin Karşılaştırılması
Onur YAMAN, Teyfik DEMİR, Arslan Kagan ARSLAN, Mehmet Akif İYIDIKER, Tolga TOLUNAY, Necip CAMUSCU, Murat ULUTAS

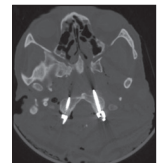


- 539** **Microsurgical Anatomy of the Labyrinthine Artery and Clinical Relevance**
Labirentin Arterin Mikrocerrahi Anatomisi ve Klinik Önemi
Adéréhime HAIDARA, Johann PELTIER, Yvan ZUNON-KIPRÉ, Hermann ADONIS N'da, Landry DROGBA, Daniel Le GARS

- 544** **Effects of Intensive Blood Pressure Lowering on Intracerebral Hemorrhage Outcomes: A Meta-Analysis of Randomized Controlled Trials**
Yoğun Kan Basıncı Azaltmanın İntraserebral Kanama Sonuçlarına Etkileri: Randomize Kontrollü Çalışmaların Bir Meta-Analizi
Junpeng MA, Hao LI, Yi LIU, Chao YOU, Siqing HUANG, Lu MA

- 552** **Neuroprotective Effects of Erythropoietin in Patients with Severe Closed Brain Injury**
Şiddetli Kapalı Beyin Hasarı Hastalarında Eritropoietinin Nöroprotektif Etkileri
Stavros ALOIZOS, Efimia EVODIA, Stavros GOURGIOTIS, Eleni-Christina ISAIA, Charalampos SERETIS, George J. BALTOPOULOS

- 559** **Feasibility of Screw Placement in the Occipital Condyle of Chinese Patients for Occipitocervical Arthrodesis: A Cadaveric Study**
Oksipitoservikal Artrodez için Çinli Hastaların Oksipital Kondiline Vida Yerleştirme Uygunluğu: Bir Kadavra Çalışması
Zuochong YU, Xiaosheng MA, Jianyuan JIANG, Xiang JIN, Feizhou LV, Lixun WANG, Xinlei XIA, Hongli WANG



Morphometric Analysis of the Sacral Canal and Hiatus Using Multidetector Computed Tomography for Interventional Procedures

566

Girişimsel İşlemler İçin Sakral Kanal ve Hiatusun Çok Kesitli Bilgisayarlı Tomografi ile Morfometrik Analizi

Alper KILICASLAN, Fatih KESKIN, Ozan BABAĞLU, Funda GOK, Mehmet Fatih ERDI, Bulent KAYA, Huseyin OZBINER, Orhan OZBEK, Osman KOC, Burkay Kutluhan KACIRA

Expression of Stem Cell Marker Nestin and MicroRNA-21 in Meningiomas

574

Meningiyomlarda Kök Hücre İşareti Nestin ve MicroRNA-21 Ekspresyonu

Vasiliki GALANI, George A ALEXIOU, Georgios MILIARAS, Efthymios DIMITRIADIS, Elena TRIANTAFYLLOU, Aggeliki GALANI, Anna GOUSSIA, Panagiotis KANAVAROS, Theoni TRANGAS

Effect of Posterior Dynamic Instrumentation on High-Intensity Zone in Lumbar Degenerative Disc Disease

578

Posterior Dinamik Enstrümantasyonun Lomber Dejeneratif Disk Hastalığında Görülen Yüksek İntensite Bölgesi Üzerine Etkisi

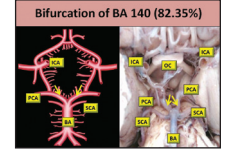
Suat CANBAY, Yaprak ATAKER, Nazan CANBULAT, Zeynep UNAL KABAĞLU, Tunc OKTENOGU, Mehdi SASANI, Ali Fahir OZER

Anatomical Variability in the Termination of the Basilar Artery in the Human Cadaveric Brain

586

İnsan Kadavra Beyninde Baziller Arter Sonlanmasının Anatomik Değişkenliği

Sandhya GUNNAL, Mujeebuddin FAROOQUI, Rajendra WABALE



Laminoplasty using the Posterior Midline Approach in the Treatment of C1-2 Spinal Tumors

595

C1-2 Spinal Tümörlerin Tedavisinde Posterior Orta Hat Yaklaşımı Kullanılarak Laminoplasti

Chang-Shun BAO, Fu-Bing YANG, Liang LIU, Bing WANG, Xiang-Guo XIA, Li-Gang CHEN

A Haptic Guided Robotic System for Endoscope Positioning and Holding

601

Haptik Kontrollü Endoskop Tutucu ve Pozisyonlandırıcı Robotik Sistem

Burak CABUK, Savas CEYLAN, Ihsan ANIK, Mehtap TUGASAYGI, Selcuk KIZIR



Angiographic Morphometry of Internal Carotid Artery Circulation in Turkish Children

608

Türk Çocuklarında İnternal Karotid Arter Dolaşımının Anjiyografik Morfometrisi

Yonca Ozkan ARAT, Anil ARAT, Kubilay AYDIN

Paclitaxel Inhibits Expression of Neuronal Nitric Oxide Synthase and Prevents Mitochondrial Dysfunction in Spinal Ventral Horn in Rats After C7 Spinal Root Avulsion

617

Paklitaksel Siçanlarda C7 Spinal Kök Avülsiyonu Sonrasında Nöronal Nitrik Oksit Sentaz Ekspresyonunu İnhibe Eder ve Spinal Ventral Boynuzda Mitokondriyal Disfonksiyonu Önler

Sze Kiat SIM, Yew Chin TAN, Jong Huat TEE, Abdul Aziz YUSOFF, Jafri Malin ABDULLAH

Intraspinal Transplantation of Autologous Neurogenically-Induced Bone Marrow-Derived Mesenchymal Stem Cells in the Treatment of Paraplegic Dogs without Deep Pain Perception Secondary to Intervertebral Disk Disease

625

İntervertebral Disk Hastalığı Sonucu Parapleji Gelişen ve Derin Ağrı Duyusu Olmayan Köpeklerin Tedavisinde İnterspinal Ototog Nörona Yönlendirilmiş Kemik İliği Kökenli Mezenkimal Kök Hücre Transplantasyonu

Omer BESALTI, Pinar CAN, Eylul AKPINAR, Zeynep AKTAS, Ayşe Eser ELCIN, Yasar Murat ELCIN

CASE REPORTS

633 **Emergency Superficial Temporal Artery to Middle Cerebral Artery Bypass After Intravenous Administration of Tissue Plasminogen Activator for Stroke**

İnme için Doku Plazminojen Aktivatörünün İntravenöz Uygulanmasından Sonra Acil Orta Serebral Arter - Süperfişiyal Temporal Arter Bypass

Satoru TAKEUCHI, Kojiro WADA, Hirohiko ARIMOTO, Kosuke KUMAGAI, Hideo OSADA, Naoki OTANI, Kentaro MORI



638 **Surgical Resection of a Complex Multiple Scalp AVF without Preoperative Embolization: A Case Report**

Preoperatif Embolizasyon Yapmadan Kompleks Çoklu Saçlı Deri AVF Cerrahi Rezeksiyonu: Bir Olgu Sunumu

Bai XUE, Liu YI, You CHAO

643 **Rapid Clinical Course of Multiple Metastatic Cerebral Angiosarcoma**

Çoklu Metastatik Serebral Anjiyosarkomda Hızlı Klinik Seyir

Zaitun ZAKARIA, Kantharuby TAMBIRAJOO, Mohammad Taufiq SATTAR, Michael A FARRELL

649 **Gradual Growth of Spontaneous Dissecting Aneurysm of the Extracranial Internal Carotid Artery After Aneurysmal Subarachnoid Hemorrhage**

Anevrizmal Subarahnoid Kanama Sonrasında Ekstrakraniyal İnternal Karotid Arter Spontan Disekan Anevrizmasınınin Giderek Büyümesi

Megumi CHATANI, Ichiro NAKAGAWA, Takeshi WADA, Hiroyuki NAKAGAWA, Kimihiko KICHIKAWA, Hiroyuki NAKASE

653 **Remote Multiple Intraparenchymal Hemorrhages Following Aneurysmal Clipping of the Anterior Communicating Artery: A Case Report and Literature Review**

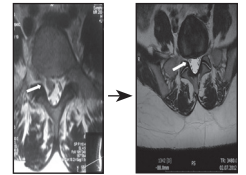
Anterior Komünikan Arter Anevrizmasınınin Kliplenmesi Sonrasında Uzak Çoklu İntraparankimal Kanama: Bir Olgu Sunumu ve Literatür Derlemesi

Kan XU, Xuan CHEN, Jianmin PIAO, Jinlu YU

657 **Spontaneous Regression of Lumbar Disc Herniation After Weight Loss: Case Report**

Zayıflama Sonrası Lomber Disk Herniasyonunun Spontan Regresyonu: Olgu Sunumu

Mehmet TOKMAK, İnci BALTEPE ALTIOK, Mustafa GUVEN, Adem Bozkurt ARAS, Murat COSAR



662 **Clinical and Angiographical Delayed Cerebral Vasospasms After Uncomplicated Surgical Clipping of Unruptured Intracranial Aneurysms: Illustrated Review and Two Case Reports**

Rüptüre Olmamış İntrakraniyal Anevrizmaların Komplikasyonsuz Cerrahi Klip Uygulamasından Sonra Klinik ve Anjiyografik Gecikmiş Serebral Vazospazmlar: Şekillerle Gözden Geçirme ve İki Olgu Sunumu

Kuhyun YANG, Jae Sung AHN, Jung Cheol PARK, Do Hoon KWON, Byung Duk KWUN

666 **Surgical Position, Cause of Extracranial Internal Carotid Artery Dissection, Presenting as Pourfour Du Petit Syndrome: Case Report and Literature Review**

Cerrahi Pozisyon Nedeniyle Ekstrakraniyal İnternal Karotid Arter Diseksiyonunun Pourfour Du Petit Sendromu Olarak Ortaya Çıkması: Olgu Sunumu ve Literatür Derlemesi

Gloria VILLALBA MARTINEZ, Irene NAVALPOTRO GOMEZ, Laura SERRANO PEREZ, Sofia GONZALEZ ORTIZ, Juan L FERNÁNDEZ-CANDIL, Eva Giralt STEINHAEUER



- 670** **Spontaneous Shrinkage of a Suprasellar Arachnoid Cyst Diagnosed with Prenatal Sonography and Fetal Magnetic Resonance Imaging: Case Report and Review of the Literature**
Prenatal Ultrasonografi ve Fetal Manyetik Rezonans Görüntüleme ile Tanı Konan Bir Suprasellar Araknoid Kistin Kendiliğinden Küçülmesi: Olgu Sunumu ve Literatürün Gözden Geçirilmesi
Ethem GOKSU, Saim KAZAN
-

- 674** **Intraoperative Neurophysiological Evidence of Hydrogen Peroxide-Induced Stroke in Insular Tumor Surgery**
İnsüla Tümörü Cerrahisinde Hidrojen Peroksitle İndüklenen İnmenin İntraoperatif Nörofizyolojik Bulguları
Alba LEÓN JORBA, Miguel LÓPEZ CUIÑA, Alessandro PRINCIPE, Gloria VILLALBA MARTÍNEZ
-

LETTER TO EDITOR

- 678** **Is It Safe to Evaluate Pedicle Screw Position with Postoperative Tomography?**
Pedikül Vidası Pozisyonunu Postoperatif Tomografi ile Değerlendirmek Güvenli mi?
Omer ERSEN, Serkan BILGIC
-

- 679** **Authors' Reply to "Pituitary Atypical Adenoma or Carcinoma Sensitive to Temozolomide Combined with Radiation Therapy: A Case Report of Early Identification and Management"**
Yazarların "Radyoterapiyle Kombine Edilen Temozolomid Duyarlı Pitüiter Atipik Adenom veya Karsinom: Erken Tanımlama ve Yönetimle İlgili Bir Olgu Sunumu" Makalesine Cevabı
Lorenzo CURTÒ, Francesco TRIMARCHI

Editorial Notice

Dear Colleagues,

I am pleased to inform you that 'Turkish Neurosurgery' has become one of the most outstanding journals in the field of Neurosurgery. We receive an increasing number of articles for review every month and more articles are accepted compared to the former years as a result. We are very glad to see your interest, support and contributions to the journal. However, we have also received some criticism about the relatively long publication process of the accepted manuscripts.

There are now more than 240 articles waiting for publication, with the oldest having an acceptance date of November 2011. There are various factors that prolong the publication process of these articles. First of all, 'Turkish Neurosurgery' is a bi-monthly journal. Although the number of the articles in a single issue has been increased in previous years, only a limited number of articles can be published in each issue. The number of accepted manuscripts within two months is usually more than or equal to the number of the published articles in each issue.

Another issue is the language considerations. Most of our accepted manuscripts have not been written or reviewed by native English speakers. Therefore, language editing of these accepted manuscripts consumes a significant amount of time and in some cases the authors do not contact us for the final approval of their paper. Another issue is plagiarism. According to our editorial policy, manuscripts are investigated for possible plagiarism once they are accepted for publication and this usually takes place at the final check of the manuscript. We have now made some changes in our editorial policies, enabling early plagiarism check for articles upon acceptance. I believe this will enable a shorter publication process for the accepted manuscripts.

I respectfully look forward to seeing you all again in the next issue.

Talat KIRIŞ