

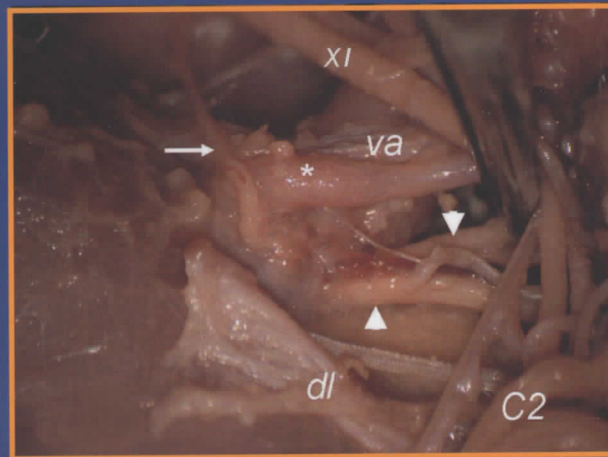
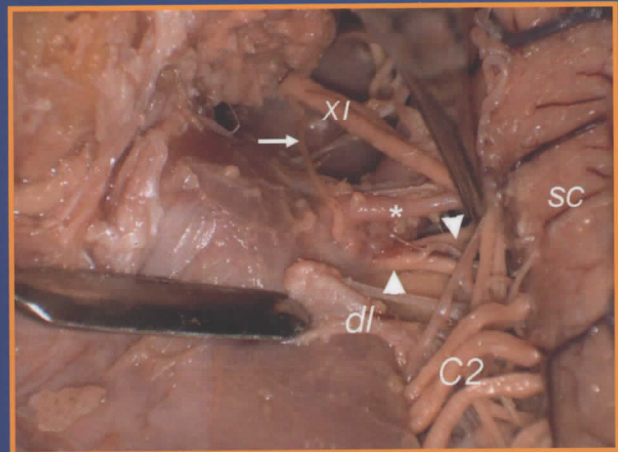
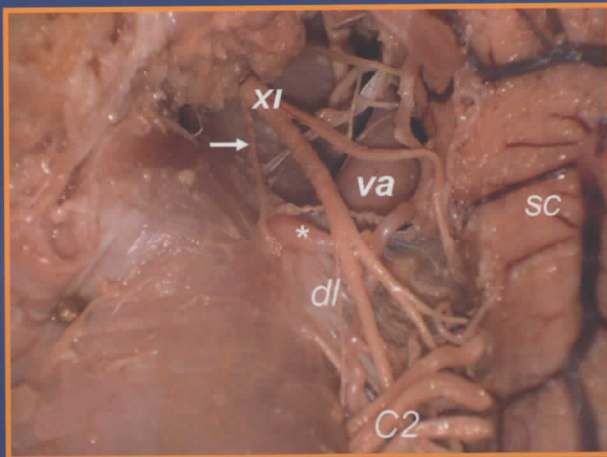
TURKISH

ISSN 1019-5149

NLM ID: 9423821

NEUROSURGERY

Official Journal of the Turkish Neurosurgical Society



Volume 19 • Number 1 • Year 2009





TURKISH NEUROSURGERY

Official Journal of the Turkish Neurosurgical Society

www.turkishneurosurgery.org.tr

Volume: 19

Number: 1

Year: 2009



TURKISH NEUROSURGICAL SOCIETY

PRESIDENTS

Nurhan Avman	1985-1986
Aykut Erbenli	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
Kemali 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-

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-

EXECUTIVE COMMITTEE

Ethem BEŞKONAKLI
Murad BAVBEK
Ağahan ÜNLÜ
Mehmet Yaşar KAYNAR
Süleyman ÇAYLI
Tuncer SÜZER
Ahmet BEKAR
Kadir KOTİL
İhsan SOLAROĞLU
Başar ATALAY

Editor: Hakan Caner

Associate Editors:

Salih Gülşen	Hakan Seçkin	Burçak Bilginer
Bülent Düz	Sait Şirin	Cem Yılmaz

Editorial Board

International

Ossama Al-Mefty, *USA*
Michael J. Apuzzo, *USA*
Issam A. Awad, *USA*
Edward C. Benzel, *USA*
Peter M. Black, *USA*
Mario Brock, *Germany*
Rudolph Fahlbusch, *Germany*
Michael Fehlings, *Canada*
Fleming Gjerris, *Denmark*
Ziya Gökaslan, *USA*
John A. Jane, *USA*
Tetsuo Kanno, *Japan*
Neal F. Kassell, *USA*
Takeshi Kawase, *Japan*
Andrew H. Kaye, *Australia*
Hidenori Kobayashi, *Japan*
Shigeaki Kobayashi, *Japan*
Edward R. Laws, Jr, *USA*
Kevin Lee, *USA*
Joseph C. Maroon, *USA*
David G. McLone, *USA*
Evandro de Oliveira, *Brazil*
Robert J. Ojemann, *USA*
Albert L. Rhoton Jr, *USA*
Concezio Di Rocco, *Italy*
James T. Rutka, *Canada*
Christian Sainte-Rose, *France*
Majid Samii, *Germany*
Bernd W. Scheitauer, *USA*
Johannes Schramm, *Germany*
Laligam Sekhar, *USA*
Marc Sindou, *France*
Robert F. Spetzler, *USA*
Kintomo Takakura, *Japan*
David GT Thomas, *England*
Nicolas de Tribolet, *Switzerland*
M. Gazi Yaşargil, *USA*

National

Bektaş Açıkgöz, *Zonguldak*
Nejat Akalan, *Ankara*
Nur Altınörs, *Ankara*
Nuri Arda, *İzmir*
Ali Arslantaş, *Eskişehir*
Başar Atalay, *İstanbul*
Ayhan Attar, *Ankara*
Murad Bavbek, *Ankara*
Kemali Baykaner, *Ankara*
Zafer Berkman, *İstanbul*
Etem Beşkonaklı, *Ankara*
Süleyman Çaylı, *Malatya*
Fahrettin Çelik, *Samsun*
M. Nusret Demircan, *İstanbul*
Nihat Egemen, *Ankara*
İlhan Elmacı, *İstanbul*
Atilla Erdem, *Ankara*
Yusuf Erşahin, *İzmir*
Engin Gönül, *Ankara*
Murat Hancı, *İstanbul*
Faruk İldan, *Adana*
Yücel Kanpolat, *Ankara*
Zafer Kars, *Sivas*
M. Yaşar Kaynar, *İstanbul*
Evren Keleş, *İstanbul*
Talat Kırış, *İstanbul*
Kemal Koç, *Kayseri*
Ender Korfalı, *Bursa*
Sait Naderi, *İstanbul*
Nezih Oktar, *İzmir*
Fahir Özer, *İstanbul*
Tunçalp Özgen, *Ankara*
Ertuğ Özkal, *Konya*
Selçuk Palaoğlu, *Ankara*
Ali Savaş, *Ankara*
İhsan Solaroğlu, *Ankara*
Tuncer Süzer, *Denizli*
İnan Turantan, *İstanbul*
Mehmet Zileli, *İzmir*
İbrahim Ziyal, *Ankara*

Redaction: Dr. Aydın Yuluğ, Aytaç Yıldızeli

Secretary: Mukadder Karakaya Çerçi

Turkish Neurosurgical Society

Taşkent Caddesi 13/4 06500 Bahçelievler, Ankara/TURKEY

Tel : +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

Turkish Neurosurgery

Volume: 19, Number: 1, Year: 2009

Official Journal of the Turkish Neurosurgical Society

Published quarterly by the Turkish Neurosurgical Society

Owned and controlled by the Turkish Neurosurgical Society

Copyright owner on behalf of the Turkish Neurosurgical Society:
Ethem BEŞKONAKLI

Editor in Chief:
Murad BAVBEK

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: 222 44 07
www.bulustasarim.com.tr

Printed at
Miki Matbaacılık San. ve Tic. Ltd. Şti.
Matbaacılar Sanayi Sitesi 506 Sk. No: 27 İvedik, Ankara, Turkey
Phone: +90 312 395 21 28

This issue is published as: 1000 copies.
Printing Date: 03.03.2009

Cover Page: Saylam, pp. 42

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 9705: 1994 standard (Requirements for Permanence). The National Library of Medicine suggests that biomedical publications be printed on acid-free paper (alkaline paper).

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: Original article, Reviews, Clinical and Experimental Studies, Case Reports, Technical notes, Historical Perspective, and Letters to the editors.

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: Include on the title page (a) complete manuscript title; (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 acknowledgment; (f) any other acknowledgment the authors wish to include. Please verify that the spelling, order, and affiliation of each author are correct. The Journal is not responsible for published misspelled names due to author error. **A Running Head** should 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 (only for clinical and experimental research papers), and Key Words. The following subheads must be included in the Structured Abstract: **Objective (Background), Methods, Results, Conclusions.** Do not cite references in the abstract, and limit the use of abbreviations and acronyms. The structured abstract must be no more than 200 words. List three to eight **Key Words after the Abstract.** It is not necessary to provide a structured abstract for submissions to the Case Reports, Review article, Technical note, Historical article and Letters to the editor sections.

3) Text: Organize the manuscript into four main headings: **Introduction, Materials and Methods, Results, and Discussion.** For Clinical Trials, Experimental and Anatomic Studies and 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).

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.

Abbreviations: 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. Write out the full term for each abbreviation at its first use unless it is a standard unit of measure.

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. 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 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:

Journal article

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

Book chapter

2. 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

Entire book

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

Software

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

Online journals

5. 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.

Database

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

World Wide Web

7. 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>

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

2. Sizing and Resolution: Line art must have a resolution of at least 1200 dpi (dots per inch), and 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 free Sheridan Digital art checker at <http://dx.sheridan.com/onl>

3. 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 for publication color figures that will enhance an article. **Authors who submit color figures will receive an estimate of the cost for color reproduction.** If they decide not to pay for color reproduction, they can request that the figures be converted to black and white at no charge. The authors may also request that their color figures be posted online only.

Manuscript Checklist (before submission. For author reference only)

1. Title page

- 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
- Acknowledgments listed for grants, technical support, and corporate support on title page

2. Structured abstract with key words (200 words)

3. Manuscript text with page numbers

4. Figure legends

5. Tables (Word, Wordperfect)

6. Figures (jpeg)

7. References double-spaced and cited in alphabetical order

Letter to the Editor: Letters to the Editor can also be submitted through Editorial Manager. Letters should refer to the title and authors of the article the letter is about and should be no longer than **300** words with no more than 3 references. 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.

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 48 hours of receipt, as requested in the cover letter accompanying the page proofs.

Publisher's contact: Fax corrected page proofs, reprint order forms, and any other related materials to Journal Production Editor, Turkish Neurosurgery, +90 312 212 64 08. Color proofs should be returned to Journal Production Editor, Turkish Neurosurgery, Taşkent Caddesi 13/4, Bahçelievler-06500 ANKARA, TURKEY

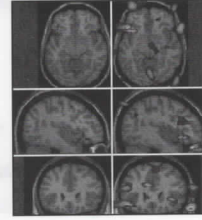
Reprints: Authors will receive a reprint order form and a price list with the page proofs. Reprint requests should be faxed with the corrected proofs, if possible. Reprints are normally shipped 6 to 8 weeks after publication of the issue in which the item appears. Contact the Reprint Department, Taşkent Caddesi No: 13/4, Bahçelievler-06500 ANKARA, TURKEY

CONTENTS

1 Atypical Language Lateralization in Patients with Left Hippocampal Sclerosis: Does the Hippocampus affect language lateralization?

Sol Hipokampal Sklerozlu Hastalarda Atipik Konuşma Lateralizasyonu: Hipokampus konuşma lateralizasyonunu etkiler mi?

Taner TANRIVERDİ, Qasim AL HİNAİ, Kelvin MOK, Denise KLEIN, Nicole POULIN, Andre OLIVIER



15 Evaluation of Cerebellar Asymmetry with Vertigo Cases: A Stereological Study

Vertigolu Olgularda Cerebellar Asimetrisinin Değerlendirilmesi

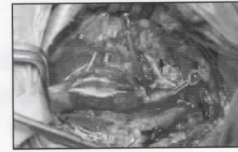
H. Selim KARABEKİR, Nuket GÖÇMEN MAS, Özge KÜSPECİ YILMAZ, Orhan BAŞ, Tolga ERTEKİN, A. Canan YAZICI, Sevda SENAN



21 Carotid Endarterectomy with Regional Anesthesia: An Audit of 71 Cases

Bölgesel Anestezi ile Karotis Endarterektomisi: 71 Vakanın Dökümü

Aykut KARASU, Demet YANDIM KUŞÇU, Göksel BAKAÇ, Muammer ÜYE, Ender OFLUOĞLU, Nesrin AKKOYUN, Betül YALÇINER, Cengiz DAYAN, Sara BAHAR, Talat KIRIŞ, Halil TOPLAMOĞLU



29 Evaluation of the Intellectual Skill Problems of Hydrocephalic Children: A Clinical Study

Hirosefalisi Olan Çocukların Entellektüel Beceri Problemlerinin Değerlendirilmesi: Bir Klinik Çalışması

Emel ERDOĞAN BAKAR, Bülent BAKAR, Yasemen IŞIK TANER, Nejat AKALAN

36 Aspiration or Capsule Excision? Analysis of Treatment Results for Brain Abscesses at Single Institute

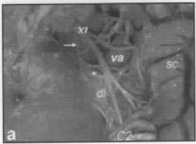
Abse Aspirasyonu mu Kapsül Eksizyonu mu? Bir Merkezden Abse Tedavi Sonuçları

Melike MUT, Burcu HAZER, Fırat NARİN, Nejat AKALAN, Tunçalp ÖZGEN

42 The Incidence and Anatomical Features of the McKenzie Branch: A Cadaver Study

McKenzie Dalının Anatomik Özellikleri ve İnsidansı: Kadavra Çalışması

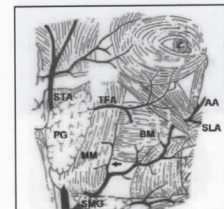
Canan Yurttaş SAYLAM, Mustafa ORHAN, Zühre Aslı AKTAN İKİZ, Hülya UÇERLER, Mehmet ZİLELİ

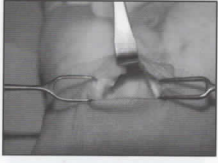


45 The Premasseteric Branch of Facial Artery: Its Importance for Craniofacial Surgery

Arteria Facialis Ramus Premassetericus'un Kraniofasial Cerrahideki Önemi

Orhan MAĞDEN, Nüket GÖÇMEN-MAS, Sevda SENAN, Mete EDİZER, Ümit KARAÇAYLI, Hamit Selim KARABEKİR



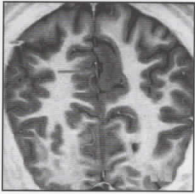


51 Comparing the Results of Limited Incision Technique and Standard Longitudinal Incision Technique for Carpal Tunnel Decompression by Numerical Grading System

Karpal Tünel Dekompresyonunda Uygulanan Sınırlı İnsizyon Tekniği ile Açık Teknik Cerrahisi Sonuçlarının Sayısal Değerlendirme Sistemi ile Karşılaştırılması
Fatih UYGUR, Celalettin SEVER, Fuat YÜKSEL

58 Operative Technique for Calvarial Reconstruction of Sagittal Craniosynostosis

Sagittal Kraniosinostozun Kalvaryel Rekonstrüksiyonunda Cerrahi Teknik
Kiril GEORGİEV, Yavor ENCHEV, Assen BUSSARSKY



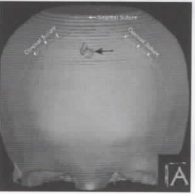
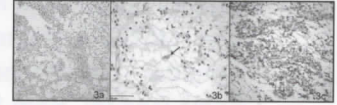
63 A Focal Cortical Dysplasia Case whose Seizure Focuses were Detected Using Interhemispheric Grid Electrode: A Technical Case Report

Epileptojenik Alanı Interhemisferik Grid Elektrodlarla Belirlenen Fokal Kortikal Displazi Vakası
Atilla ERDEM, Vedat AÇIK, Alev LEVENTOĞLU, Caner SARILAR, Ali CANSU

69 Intraventricular Dysembryoplastic Neuroepithelial Tumor-Like Neoplasm with Disseminated Spinal Tumor

Yaygın Spinal Tümör ile Birlikte Ventrikül İçi Disembriyoplastik Nöroepitelyal Tümör-Benzeri Lezyon

Burçak BİLGİNER, Figen SÖYLEMEZOĞLU, Ayşenur CİLA, Nejat AKALAN

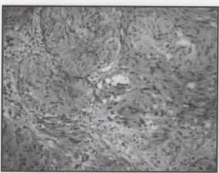
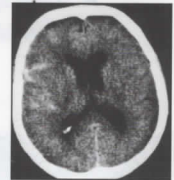


73 Gunshot Injuries Due to Celebratory Gun Shootings

Kutlama Atışı Yaralanmaları
Mevci ÖZDEMİR, Ağahan ÜNLÜ

77 Crossed Wernicke's Aphasia After Aneurysmal Subarachnoid Hemorrhage: A Case Report

Olgu Sunumu: Subaraknoid Kanama Sonrası Çapraz Wernicke Afazisi
Hakan SEÇKİN, Kazım YİĞİTKANLI, Özlem KAPUCU, Murad BAVBEK



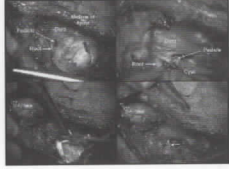
82 Atypical Intracerebral Schwannoma Mimicking Glial Tumor: Case Report

Glial Tümörü Taklit Eden Atipik İntrakranial Şivannom: Olgu Sunumu
Ahmet MENKÜ, İbrahim Suat ÖKTEM, Olgun KONTAŞ, Hidayet AKDEMİR

86 Cardiac Decompensation in a Patient with Eisenmenger Syndrome Undergoing T5-T7 Levels Laminectomy in the Sitting Position

Oturur Pozisyonda T5-T7 Laminektomi Yapılan Eisenmenger Sendromlu bir Hastada Kardiak Dekompensasyon

Zahid Hussain KHAN, Ali Akbar Zeinaloo, Razmeh Hussain KHAN,
Mohammad R. RASOULİ



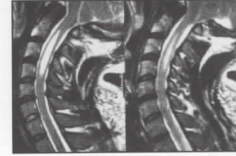
91 Symptomatic Foraminal Extradural Meningeal Cyst

Semptomatik Foraminal Ekstradural Meningial Kist

Ramazan DURMAZ, Zühtü ÖZTÜRK, Emre DELEN, Evrim ÇİFTÇİ,
Metin Ant ATASOY

96 Spontaneous Syringomyelia Resolution at an Adult Chiari Type 1 Malformation

Kendiliğinden Emilen Syringomyeli ve Erişkin Chiari Tip 1 Birlikteliği
Fatih Ersay DENİZ, Erol ÖKSÜZ



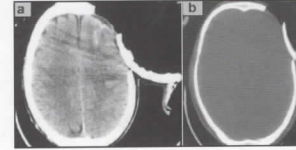
99 Spontaneous Cervical Epidural Hematoma Causing Brown-Sequard Syndrome: Case Report

Brown-Sequard Sendromuna Neden Olan Spontan Servikal Epidural Hematom: Olgu Sunumu

Ender OFLUOĞLU, Ayşegül ÖZDEMİR, Halil TOPLAMAOĞLU, Erhan SOFUOĞLU

103 Post-traumatic Compound Elevated Fracture of Skull Simulating a Formal Craniotomy

Eski bir Kranyotomiye Taklit Eden Kafatasının Karmaşık Kalkma Kırığı
Sachin A. BORKAR, Sumit SİNHA, Bhavani Shankar SHARMA



106 Endoscopic Transrostral-Transsphenoidal Approach to Petrous Apex Cholesterol Granuloma: Case Report

Petroz Apeks Kolesterol Granülomlarına Endoskopik Transrostral-Transsphenoidal Yaklaşım

Mohammad SAMADIAN, Mohsen VAZİRNEZAMİ, Hamid MOQADDASİ,
Mohammad Rakhshan, Fatemeh KHORMAEE, Halen ASHRAİ