# Mr Neurography An Issue Of Neuroimaging Clinics The Clinics Radiology

#Neurography #Neuroimaging clinics #Radiology issues #Neurological diagnostic imaging #Clinical neuroimaging review

This document, 'Mr Neurography,' delves into a significant issue within the specialized field of neuroimaging clinics, specifically focusing on advanced radiological techniques. It offers in-depth analysis of critical challenges and innovative solutions in neurological diagnosis, providing essential insights for practitioners and researchers in the radiology community. The content aims to clarify complex cases and highlight best practices in clinical neuroimaging.

The free access we provide encourages global learning and equal opportunity in education.

We appreciate your visit to our website.

The document Neurography Clinics Radiology Insights is available for download right away.

There are no fees, as we want to share it freely.

Authenticity is our top priority.

Every document is reviewed to ensure it is original.

This guarantees that you receive trusted resources.

We hope this document supports your work or study.

We look forward to welcoming you back again.

Thank you for using our service.

This document is one of the most sought-after resources in digital libraries across the internet.

You are fortunate to have found it here.

We provide you with the full version of Neurography Clinics Radiology Insights completely free of charge.

MR Neurography, An Issue of Neuroimaging Clinics,

Editor Avneesh Chhabra and authors review important areas in Endovascular Management of Neurovascular Pathology in Adults and Children. Articles will include anatomic considerations, upper cranial nerves, lower cranial nerves, peripheral neuropathy, brachial plexus, upper extremity neuropathy, pelvis and lumbosacral plexus, lower extremity nerves, chronic pelvic pain syndrome, nerve tumors and tumor-like conditions. Other articles will focus on a primer for imagers, neurography research, DTI and future directions, technical considerations, neurographic interpretation, and more!

Advanced MR Imaging in Clinical Practice, An Issue of Radiologic Clinics of North America,

Editor Hersh Chandarana, MD and authors review Advanced MR Imaging in Clinical Practice. Articles will include: Current Status of Diffusion Weighted Imaging; Current Status of Perfusion Weighted Imaging; Non-gadolinium Enhanced MR Angiography; Pearls and Pitfalls of 3 T imaging; Implementing MR Neurography in Clinical Practice; Imaging around Hardware and Metal; Recent Advances in T1-and T2-Weighted Imaging of the Abdomen and Pelvis; Recent Advances in Neuro and Spine Imaging; Advances in MR Hardware and Software, and more!

Neuroradiology Applications of High-Field MR Imaging, An Issue of Neuroimaging Clinics - E-Book

Information for neuroimaging specialists includes a "Diagnostic Checklist or "Clinical Recommendations along with tables presenting recommended MR sequences and protocols. The primary focus of

the issue is 3.0T; one article specifically deals with 7T and higher fields are mentioned sporadically throughout. Topics include: Tumor High-Field MR; Stroke High-Field MR; High-Field MR of Inflammation; Vascular Disorders: MR Angiography of Brain Vessels, MR Angiography of Neck Vessels, and Perfusion Imaging; Plaque Imaging; Neurodegenerative Disease; Epilepsy Imaging; Head and Neck Oncology Applications; Pediatric High-Field Imaging; Spine High-Field Imaging; Ultra High-Field Imaging; Future Perspectives on High-Field MR

MR Spectroscopy of the Brain, An Issue of Neuroimaging Clinics,

This issue focuses on MR Spectroscopy (MRS) for neuroimaging. Topics include MRS for Common Dementias, Epilepsy, Metabolic Disorders, Hypoxic-isquemic Injuries, Multiple Sclerosis, Brain Infections, Pediatric Brain Tumors, Adult Brain Neoplasms.

Clinical Applications of Functional MRI, An Issue of Neuroimaging Clinics,

Editor Jay J. Pillai and authors review important areas in Clinical Applications of Functional MRI. Articles will include: Blood Oxygen Level Dependent Functional Magnetic Resonance Imaging for Presurgical Planning; Visual Mapping Using Blood Oxygen Level Dependent Functional MRI; Applications of BOLD fMRI and DTI in Epilepsy; Pretherapeutic fMRI in Children; BOLD fMRI for Presurgical Planning; Brain Tensor Imaging for Brain Malformations: Does it Help?; Technical Considerations for fMRI Analysis; Special Considerations/Technical Limitations of BOLD fMRI; The Economics of Functional MRI: Clinical and Research; Memory Assessment in the Clinical Context Using fMRI: A Critical Look at the State of the Field; Resting State BOLD fMRI for Pre-surgical Planning, and more!

Imaging of Ischemic Stroke, An Issue of Neuroimaging Clinics - E-Book

Topics include: Imaging of Ischemic Stroke; Hemorrhagic Stroke and Non-traumatic Intracranial Hemorrhage; Acute Neuro-Interventional Therapies; Orbital and Intracranial Complications of Sinusitis; Traumatic Brain Injury; Central Nervous System Infections; Facial Trauma: What the Surgeon Wants to Know; Intracranial Hypo- and Hypertension; Seizures; Pediatric Central Nervous System Emergencies; Spine Emergencies; Infections and Inflammatory Processes of the Neck.

Pediatric Demyelinating Disease and its Mimics, An Issue of Neuroimaging Clinics,

This issue reviews the state of the art in pediatric demyelinating diseases. Articles cover topics on child-hood transverse myelitis, neuromyelitis optica, multiple sclerosis, acute demyelinating encephalopathy, and more.

Pediatric Neuroimaging: State-of-the-Art, An Issue of Magnetic Resonance Imaging Clinics of North America, E-Book

Approx.240 pages Approx.240 pages

Adult Brain Tumors, An Issue of Neuroimaging Clinics of North America, E-Book

This issue of Neuroimaging Clinics of North America focuses on Adult Brain Tumors, and is edited by Dr. Lara Brandão. Articles will include: Posterior Fossa Tumors in Adult Patients; Lymphomas and Adult Brain Tumors; Pre-Treatment Evaluation of Gliomas; Post Treatment Evaluation of Gliomas; Metastasis in Adult Brain Tumors; Extraparenchymal Lesions in Adult Brain Tumors; Interesting Case Studies in Adult Brain Tumors; Advanced MR Imaging Techniques in Daily Practice; and more!

Update on Spine Imaging, An Issue of Magnetic Resonance Imaging Clinics of North America, E-Book

This issue of MRI Clinics of North America focuses on MR Imaging of the Spine, and is edited by Dr. Mario Muto. Articles will include: Diagnostic Approach to Pediatric Spin Pathology; Neuroimaging of Scoliosis and Sagittal Balance; Neuroimaging of the Degenerative Spine; Neuroimaging of Spinal Instability; Neuroimaging of the Traumatic Spine; Neuroimaging of Spine Infections; Neuroimaging of the Post Operative Spine; Neuroimaging of Spinal Canal Stenosis; Neuroimaging of Spinal Tumors, and more!

fMRI in the Pre-Operative Brain Tumor Setting, An Issue of Neuroimaging Clinics of North America, E-Book

This issue of Neuroimaging Clinics of North America focuses on fMRI for the Diagnosis, Treatment and Management of Brain Tumors and is edited by Dr. Andrei I. Holodny. Articles will include: Introduction to fMRI; How to start your clinical fMRI program; Diffusion tractography; The problem of neurovascular uncoupling; Dynamic Resting State fMRI; Resting State fMRI of language function; Methods of fMRI analysis; Patient preparation and fMRI paradigm design; Functional brain anatomy; Neurosurgical Applications of fMRI; and more!

MRI and Traumatic Brain Injury, An Issue of Neuroimaging Clinics of North America, E-Book

In this issue of Neuroimaging Clinics, guest editors Drs. Pejman Jabehdar Maralani and Sean Symons bring their considerable expertise to the topic of Neurotrauma. Top experts in the field cover key topics such as conventional MRI in trauma management in adults and children; imaging approach to concussion; clinical updates on concussion; the current state of DWI/DTI for trauma prognostication; the current state of fMRI/rs-fMRI for trauma prognostication; and more. Contains 13 relevant, practice-oriented topics including MRI perfusion in traumatic brain injury; traumatic brain injury and vision; traumatic brain injury and cerebrovascular reactivity; SWI / qSM in traumatic brain injury; imaging of non-accidental trauma in children; advances in MRI related to TBI management; and more. Provides in-depth clinical reviews on neurotrauma, offering actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

Patient Centered Neuroimaging in the Emergency Department, An Issue of Neuroimaging Clinics of North America E-Book

This issue of Neuroimaging Clinics of North America focuses on Emergent Neuroimaging: A Patient Focused Approach, and is edited by Dr. Diego B. Nunez. Articles will include: The adult patient with acute neurologic deficit: an update on imaging trends; The patient with thunderclap headache; Imaging considerations in the patient with intracerebral hemorrhage; Emergent neuroimaging in the oncologic and immunosuppressed patient; Emergent neuroimaging during pregnancy and puerperium; Imaging the unconscious "found down patient in the ED; Neurological emergencies in the pediatric patient including accidental and non-accidental trauma; Head and neck injuries: special considerations in the elderly patient; Current challenges in the use of CT and MRI in suspected cervical spine trauma; Radiation considerations in emergent neuroimaging; Blunt cranio-cervical trauma: Does the patient have a cerebral vascular injury?; New and emerging patient-centered CT imaging and image-guided treatment paradigms for maxillofacial trauma; Acute neurological syndromes beyond stroke: The role of emergent MRI; and more!

Advances in Imaging of Multiple Sclerosis, an Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics of North America focuses on Imaging of Multiple Sclerosis: Diagnosis and Management, and is edited by Dr. Alex Rovira Cañellas. Articles will include: Multiple Sclerosis: Epidemiological, Clinical and Therapeutic Aspects; Brain and Spinal Cord MR Imaging Features in Multiple Sclerosis and Variants; Neuromyelitis Optica Spectrum Disorders; Radiologically Isolated Syndrome; MRI in Monitoring and Predicting Treatment Response in Multiple Sclerosis; Cortical Grey Matter MR Imaging in Multiple Sclerosis; Brain Atrophy in Multiple Sclerosis: Technical Aspects and Clinical Relevance; Iron Mapping in Multiple Sclerosis; Microstructural MR Techniques in Multiple Sclerosis; Molecular and Metabolic Imaging in Multiple Sclerosis; Insights from Ultra-high Field Imaging in Multiple Sclerosis; Pediatric Multiple Sclerosis: Distinguishing Clinical and MRI Features, and more!

Advances in Diffusion-Weighted Imaging, An Issue of Magnetic Resonance Imaging Clinics of North America

This issue of MRI Clinics focuses on Advances in Diffusion-weighted Imaging and is edited by Dr. Kei Yamada. Articles will include: Technical Basics of Diffusion-weighted Imaging; Neurofluid as Assessed by Diffusion-weighted Imaging; Diffusion-weighted Imaging is the Key to Diagnoses; Diffusion-weighted Imaging of the Spinal Cord; Intracranial Abnormalities with Diffusion Restriction; Brain Anatomy by Diffusion-weighted Imaging; Measuring Perfusion: Intravoxel Incoherent Motion; Temperature Measurement by Diffusion-weighted Imaging; Diffusion-weighted Imaging at Ultra-high Field MRI; Dif-

fusion-weighted Imaging for Radiomics; Diffusion Weighted Imaging for Infants; Diffusion-weighted Imaging of the Head and Neck (Including Temporal Bone); DTI, DKI and Q-space Imaging; and more!

#### Neuroimaging: An Issue of Radiologic Clinics

Neuroimaging is a specialized field of medical imaging that uses a wide range of structural and functional imaging techniques to study the structure and function of the CNS and the brain. Neurology makes use of quantitative techniques. From large sectional anatomy to the subatomic level, structural neuroimaging encompasses all scales of anatomical imaging. The primary methods for structural neuroimaging are computerized tomography (CT) scans and magnetic resonance imaging (MRI). Radiology is a medical specialty that involves the use of medical imaging techniques to diagnose and treat diseases. Radiology, unlike neuroimaging, uses qualitative methods based on subjective impressions and substantial clinical training but it does occasionally employ quantitative tools. Functional brain imaging techniques like functional magnetic resonance imaging (fMRI) are standard in neuroimaging but uncommon in radiology. This book discusses the fundamental and modern approaches to neuroimaging. It includes some of the vital pieces of work being conducted worldwide on various topics related to neuroimaging and radiology. This book will serve as a source of comprehensive knowledge to the readers.

#### Evidence-Based Vascular Neuroimaging, An Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics focuses on Evidence-Based Vascular Neuroimaging and is edited by Drs. Ajay Malhotra and Dheeraj Gandhi. Articles will include: Unruptured Intracranial Aneurysms: Duration, Frequency and Modality Used for Surveillance; Vasospasm: Role of Imaging in Detection and Monitoring Treatment; Extracranial Vascular Disease: Carotid Stenosis and Plaque Imaging; Subarachnoid Hemorrhage: Distribution and Role of Imaging; Acute Ischemic Stroke: MRI-based Paradigms; Imaging of Intracranial Hemorrhage (Non-subarachnoid Hemorrhage); Brain Arteriovenous Malformations: The Role of Imaging in Treatment Planning and Monitoring Response; Intracranial Vascular Disease and Vessel Wall Imaging; Acute Ischemic Stroke: CT/CTA/CTP and Their Role; Imaging for Treated Aneurysms (including clipping, coiling, stents, flow-diverters); and more!

# Neuroradiology, An Issue of Radiologic Clinics of North America

This issue of Radiologic Clinics of North America focuses on Neuroradiology and is edited by Drs. Jacqueline A. Bello and Shira Slasky. Articles will include: CT Perfusion in Acute Stroke; The Role of DTI and fMRI Prior to Brain Tumor Surgery; Pediatric Primary Neoplasms; Radiomics of Glioma: Genotypes and their Imaging Correlates; MR Spectroscopy and MR Perfusion of Brain Neoplasms; Etiologies of Acute Stroke: A Patterned Approach; Recent Hot Topics: RCVS and PRES, Venous Occlusive Disease; CNS Lesions in Immunocompromised Patients; Imaging Glioblastoma Post-treatment: Progression, Pseudoprogression, Pseudoresponse, Radiation Necrosis; Imaging of Acute Stroke: Current State; Adult Primary Brain Neoplasms: (Including 2016 WHO classification); Large and Small Vessel Vasculopathies; and more!

## Neuroimaging, An Issue of Neurologic Clinics,

With each passing year neuroimaging becomes more and more central in the diagnosis of neurologic disease, as its capacity to detect subtle changes in nervous system tissue increases. This issue of Neurologic Clinics features twelve articles that address the key clinical applications of the several radiologic modalities. Topics include: Neuro-Imaging of Infectious Disease; Neuro-Imaging of Dementia; Imaging of Traumatic Brain Injury; 3. MR Guided Focused Ultrasound: A New Technology for Clinical Neurosciences; Novel Multi- Modality Imaging Techniques for the Diagnosis and Evaluation of Arteriovenous Malformations; Neuroimaging in the Critical Care Environment; Imaging of Cerebral Ischemia: From Acute Stroke to Chronic Disorders; Imaging of Cancer-Related Neurotoxicity; Neurocutaneous Syndromes; Imaging of Chiari Malformation and Hydrocephalus; and others.

#### MR Contrast Agents, An Issue of Magnetic Resonance Imaging Clinics - E-Book

MRI contrast agents improve visibility of internal body structures. This issue offers a complete, practically focused review of the use of a variety of contrast agents for MR Imaging. A contrast agent not only must be safe, but also efficacious and cost-effective, and the articles in this issue address all three of these concerns and the uses of contrast agents for a variety of applications.

This issue provides an overview of anatomy for the practicing radiologist using MR. Neuroanatomy is covered in separate articles on the brain, neck, spine, and skull base. Body imaging is reviewed in articles on chest, abdomen, breast, and pelvis, and finally, the musculoskeletal system is thoroughly displayed by articles on shoulder, elbow, wrist and hand, knee, and ankle and foot. Long bones of the upper and lower extremities are reviewed in separate articles as well.

# Magnetoencephalography, An Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics of North America focuses on Magnetoencephalography (MEG), and is edited by Drs. Roland Lee and Mingxiong Huang. Articles will include: MEG signal processing, forward modeling, MEG inverse source imaging, and Coherence analysis; Magnetoencephalography for pre-surgical functional mapping; Magnetoencephalography for mild TBI and PTSD; Magnetoencephalography for autism; Magnetoencephalography for schizophrenia; Magnetoencephalography for Alzheimer's disease; Pediatric Magnetoencephalography; The MEG Measurement Techniques; MEG and Language/Linguistics; MEG for Epilepsy; Integration of MEG results into the patient workup – Merging multiple modalities; and more!

Temporal Bone Imaging: Clinicoradiologic and Surgical Considerations, An Issue of Neuroimaging Clinics of North America, Ebook

This issue of Neuroimaging Clinics of North America focuses on Temporal Bone Imaging: Clinicoradiologic and Surgical Considerations, and is edited by Drs. Gul Moonis and Amy Fan-Yee Juliano. Articles will include: Imaging of Temporal Bone Infection Inflammation; Imaging of Meniere's Disease; Treatment of Vestibular Schwannoma; Post Operative Imaging of the Temporal Bone; Otosclerosis and Dysplasias of the Temporal Bone; Imaging of Syndromes with Temporal Bone Abnormalities; Imaging of Third Window Lesions; Imaging of Tinnitus; Imaging of Temporal Bone Tumors; Imaging of Pediatric Hearing Loss; Common Otologic Surgical Procedures: Clinical Decision Making Pearls; Imaging of Temporal Bone Trauma: A Clinicoradiologic Perspective; and more!

MR in the Emergency Room, An issue of Magnetic Resonance Imaging Clinics of North America, E-Book

This issue of MRI Clinics of North America focuses on MR in the Emergency Room. Articles will include: MR Imaging of Stroke; MR Imaging of Acute Head and Neck Infections; Use of MR in the Evaluation of Cranial Trauma; MR of Spinal Emergencies; Emergency MR Imaging of Musculoskeletal Trauma; Use of MR in Non-traumatic Musculoskeletal Emergencies; MR Imaging of Abdominal Pain in Pregnancy; MR of Pelvic and Gastrointestinal Emergencies; Use of MR in Pediatric Emergencies; Use of MR in Pancreatico-Biliary Emergencies; and more!

# Head and Neck MRI, An Issue of Magnetic Resonance Imaging Clinics - E-Book

This issue reviews the state of the art of head and neck imaging, with clear reviews of the role of MRI in the diagnosis and treatment of some of the most common head and neck conditions. Articles discuss imaging of head and neck tumors, head and neck reconstruction for cancer treatment, oral cavity carcinoma and imaging of the TMJ. Reviews cover patterns of perineural spread, MRI applications in temporal bone pathology, MRI of brachial plexus, and imaging of the pediatric neck. Orbital pathology and optic pathways are covered, as well as paranasal sinuses, and sella and parasellar regions.

### Neuroimaging, An Issue of Neurologic Clinics E-Book

This issue of Neurologic Clinics, guest edited by Laszlo L. Mechtler, will cover key topics in Neuroimaging. This issue is one of four selected each year by our series consulting editor, Dr. Randolph W. Evans. Topics discussed in this issue will include: Future of Neuroimaging, Neuroimaging for the Neurologist, Imaging in Pregnancy, Multiple Sclerosis Mimic, Diseases that cause Dementia, Acute Stroke, DBS, NPH and Hydrocephalus, Venous Disease of the Brain, Cranial Nerve Imaging, and Neuro-ultrasonography, among others.

# Imaging of White Matter, An Issue of Radiologic Clinics of North America,

White matter lesions have been always challenging for general as well as neuroradiologits. Any disease process in the brain or body can affect white matter, making it very difficult to pinpoint the diagnosis. However the application of the proper algorithmic approach, pattern of distribution, and study of the

morphology of these lesions makes it possible to limit the differential diagnosis and, many times, pinpoint specific diagnosis. Advancement of various imaging techniques predominately in MR (MR spectroscopy, MR perfusion, diffusion tensor imaging (DTI). functional MR) along with PET has further improved our understanding of these disease processes. However, most of these techniques are new and not well understood by every physician. This issue will cover the topics necessary to master these techniques.

Imaging of Brain Tumors, An Issue of Magnetic Resonance Imaging Clinics of North America,

This issue of MRI Clinics of North America focuses on Imaging of Brain Tumors, and is edited by Dr. Rivka Colen. Articles will include: Multiparametric Imaging Analysis: MR Spectroscopy; Genomics and MicroRNAs in Glioma; Metabolomics and Hyperpolarization MRI in Brain Tumors; Imaging Genomics in Glioma; Radiomics and Big Data in Imaging; RANO Criteria and Clinical Endpoints; Gliomas: The New WHO Brain Tumor Pathological/Molecular Classification and Clinical and Radiographic Classifications; Liposomal Contrast Agents and Nanoparticles in Brain Tumor Imaging; Multiparametric Imaging Analysis: Perfusion, and more!

Advanced Imaging in Ischemic and Hemorrhagic Stroke, an Issue of Neuroimaging Clinics of North America

In this issue of Neuroimaging Clinics, guest editors Drs. Joseph Gemmete and Zachary Wilseck bring their considerable expertise to the topic of Advanced Imaging in Ischemic and Hemorrhagic Stroke. Top experts in the field discuss metabolic imaging such as PET, in vivo O17 MRS imaging, quantitative sodium MR imaging, pharmacological MRI (pHMRI), dual-energy CT, vessel wall imaging, and more. Contains 11 relevant, practice-oriented topics including CT/CTA/perfusion in acute ischemic stroke/vasospasm; MRI/MRA/perfusion in acute ischemic stroke and vasospasm; MR imaging of cerebral aneurysmal wall for rupture risk; dual-energy CT in imaging of acute ischemic and hemorrhagic stroke; metabolic imaging of acute ischemic stroke (PET, spectroscopy, O17 imaging, sodium imaging, PH imaging); and more. Provides in-depth clinical reviews on advanced imaging in ischemic and hemorrhagic stroke, offering actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

Ischemic Stroke, An Issue of Neuroimaging Clinics of North America E-Book

This issue of Neuroimaging Clinics of North America focuses on Ischemic Stroke, and is edited by Dr. Lotfi Hacein-Bey. Articles will include: Clinical distinction of cerebral ischemia and triaging of patients in the ED: mimics, wake-ups, late strokes and chameleons; Telestroke; CT, CTA and CT perfusion of acute stroke; MRI based imaging of acute stroke; Advanced neuroimaging of acute stroke: collaterals, permeability imaging, Arterial Spin Labeling; Penumbra, oligemia, infarction: understanding hypoperfusion with neuroimaging?; Pathophysiology of thrombus and clinical implications; Neuro-interventional management of stroke; Non interventional treatment options for stroke; What to look for on post-stroke neuroimaging; Reperfusion changes after stroke and practical approaches for neuroprotection; Economics of stroke treatment (value-based payment models and other); Health care organization of neuroradiological management of stroke at regional and national levels: the French experience; and more!

Imaging of Movement Disorders, an Issue of Neuroimaging Clinics

Articles include: Anatomy of Basal Ganglia; Classification of Movement disorders; MR techniques in the diagnosis of Parkinsonian syndromes; PET/SPECT in the diagnosis of Parkinsonian syndromes; The role of imaging in the diagnosis of Vascular PD; Role of neuroimaging in the diagnosis of secondary dystonia; Role of neuroimaging in the evaluation of Tremor; Spot neuroradiological diagnosis in movement disorders; Role of transcranial ultrasound in the diagnosis of movement disorders; Role of imaging in surgical treatment of movement disorders (DBS, lesioning, STN+GPI+PPN, post-op, safety); Current Role of fMRI in diagnosis of movement disorders.

Modern Imaging Evaluation of the Brain, Body and Spine, An Issue of Magnetic Resonance Imaging Clinics,

Magnetic Resonance Spectroscopy (MRS) is an analytical method used in chemistry that enables the identification and quantification of metabolites in samples. It differs from conventional Magnetic Resonance Imaging in that spectra provide physiological and chemical information instead of anatomy. This issue examines MRS methods for a wide variety of body imaging needs.

# Headache and Chiari Malformation, An Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics of North America focuses on Headache and Chiari Malformation, and is edited by Dr. Noriko Salamon. Articles will include: Adult headache and neuroimaging: Indication of neuroimaging in general and economical overview; Headache caused by intracranial hypotension CSF leak; Headache caused by sinus disease; Headache and Chiari malformation; Headache and aneurysm; Treatment of headaches; Headache and neuroimaging: Indication and modality of choice in headaches in pediatrics; Headache and brain tumor; Headache and advanced neuroimaging: Understanding pain circuit and functional assessment of head pain; and more!

#### Clinical Applications of Diffusion Imaging of the Brain, an Issue of Neuroimaging Clinics

Topics covered in this issue are: Basic principles of Diffusion Imaging; Diffusion MR Imaging: An Important Tool in the Assessment of Brain Tumors; Diffusion MR imaging of Acute Ischemic Stroke; Diffusion Imaging in Demyelinating Diseases; Diffusion Imaging in Brain Infection; Diffusion Imaging in Brain Trauma; Diffusion Imaging in the Neonate Brain; Diffusion MR Imaging for Monitoring Treatment Response; Assessment of Brain Development; Future Horizons in Diffusion Imaging of the Brain.

#### MRI and Brain Trauma, an Issue of Neuroimaging Clinics of North America

In this issue of Neuroimaging Clinics, guest editors Drs. Pejman Jabehdar Maralani and Sean Symons bring their considerable expertise to the topic of Neurotrauma. Top experts in the field cover key topics such as conventional MRI in trauma management in adults and children; imaging approach to concussion; clinical updates on concussion; the current state of DWI/DTI for trauma prognostication; the current state of fMRI/rs-fMRI for trauma prognostication; and more. Contains 13 relevant, practice-oriented topics including MRI perfusion in traumatic brain injury; traumatic brain injury and vision; traumatic brain injury and cerebrovascular reactivity; SWI / qSM in traumatic brain injury; imaging of non-accidental trauma in children; advances in MRI related to TBI management; and more. Provides in-depth clinical reviews on neurotrauma, offering actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

# Functional Connectivity, An Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics of North America focuses on Functional Connectivity, and is edited by Dr. Jay Pillai. Articles will include: Applications of rs-fMRI to presurgical mapping: sensorimotor mapping; Dynamic functional connectivity methods; Machine learning applications to rs-fMRI analysis; Frequency domain analysis of rs-fMRI; Applications of rs-fMRI to epilepsy; Data-driven analysis methods for rs-fMRI; Applications of rs-fMRI to presurgical mapping: language mapping; Limitations of rs-fMRI in the setting of focal brain lesions; Applications of rs-fMRI to neuropsychiatric disease; Applications of rs-fMRI to Traumatic Brain Injury; Applications of rs-fMRI to neurodegenerative disease; Graph theoretic analysis of rs-fMRI; and more!

# Pediatric Head and Neck Imaging, an Issue of Neuroimaging Clinics of North America: Volume 33-4

In this issue of Neuroimaging Clinics, guest editor Dr. William T. O'Brien, Sr., brings his considerable expertise to the topic of Pediatric Head and Neck Imaging. The differential diagnosis of neck masses in pediatric patients differs compared to masses that arise in adults. In this issue, top experts in the field discuss imaging of hearing loss, sinus infections, neck masses, and congenital lesions, and more. Contains 11 relevant, practice-oriented topics including conductive hearing loss in children; congenital cystic neck masses; common solid and vascular neck masses in children; pediatric facial and paranasal sinus infections; infectious and inflammatory processes of the orbits in children; and more. Provides in-depth clinical reviews on pediatric head and neck imaging, offering actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

Multiple Sclerosis and Associated Demyelinating Disorders, An Issue of Neuroimaging Clinics of North America

In this issue of Neuroimaging Clinics, guest editors Drs. Frederik Barkhof and Yaou Liu bring their considerable expertise to the topic of Multiple Sclerosis and Associated Demyelinating Disorders. Top experts in the field discuss advanced brain imaging in CNS demyelinating diseases; new imaging markers in MS and related disorders: smoldering inflammation and central vein sign; the use of AI in MS and white matter disease; optic nerve imaging in MS and related disorders; atypical demyelinating disorders; and more. Co-Editor Frederik Barkhof, MD, has received the National Multiple Sclerosis Society and the American Academy of Neurology's 2018 John Dystel Prize for Multiple Sclerosis Research for his many years of outstanding research in the field of MS, especially in advancing the understanding and clinical use of brain imaging. Contains 12 relevant, practice-oriented topics including diagnostic criteria for MS, NMOSD and MOGAD; routine MRI protocol and standardization in CNS demyelinating diseases; spinal cord imaging in MS and related disorders; treatment monitoring in MS: efficacy and safety; cognitive impairment in MS and related disorders; and more. Provides in-depth clinical reviews on multiple sclerosis and associated demyelinating disorders, offering actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field. Authors synthesize and distill the latest research and practice guidelines to create clinically significant, topic-based reviews.

#### Imaging of Brain Concussion, an Issue of Neuroimaging Clinics of North America

This issue of Neuroimaging Clinics of North America focuses on Imaging of Brain Concussion, and is edited by Drs. Roy Riascos and Eliana E. Bonfante-Mejia. Articles will include: Traumatic Brain Injury: definition, neurosurgery, trauma-orthopedics, neuroimaging, and psychology-psychiatry; Multimodality advanced imaging for brain concussions; Perfusion weighted images in brain concussion; PET and SPECT in brain concussion; Imaging of chronic concussion; Imaging of concussion in young athletes; Imaging on concussion in blast injury; Conventional CT and MR in brain concussion; Structural imaging: structural MRI in concussion; Susceptibility weighted imaging and MR spectroscopy in concussion; Functional imaging fMRI - BOLD and resting state techniques in mTBI; Diffusion Weighted and Diffusion Tensor Imaging in mTBI; and more!

Clinical Applications of MR Diffusion and Perfusion Imaging, an Issue of Magnetic Resonance Imaging Clinics

Diffusion-weighted MR Imaging, Perfusion MR Imaging, and Diffusion Tensor Imaging provide information that is present in no other imaging modality. With Guest Editor Scott Reeder focusing on the body and Guest Editor Pratik Mukerjee exploring the neurological aspects of these three imaging modalities, this is a must-have resource for any radiologist involved in MR Imaging. It explores such subjects as: Diffusion weighted MR imaging in musculoskeletal radiology, Arterial Spin Labeled Perfusion Imaging, and Diffusion Tensor Imaging of Neurodegenerative Diseases.