

## Reviews

- CME** 1 **Non-Contrast Enhanced MR Angiography: Established Techniques**  
*Mitsue Miyazaki and Masaaki Akahane*
- CME** 20 **Predictive Value of MRI in the Localization, Staging, Volume Estimation, Assessment of Aggressiveness, and Guidance of Radiotherapy and Biopsies in Prostate Cancer**  
*Derya Yakar, Oscar A. Debats, Joyce G.R. Bomers, Martijn G. Schouten, Pieter C. Vos, Emile van Lin, Jurgen J. Fütterer, and Jelle O. Barentsz*
- 32 **Neuroimaging of Pediatric Posterior Fossa Tumors Including Review of the Literature**  
*Andrea Poretti, Avner Meoded, and Thierry A.G.M. Huisman*

## Original Research

- Neuroimaging**
- 48 **High Resolution Magnetic Susceptibility Mapping of the Substantia Nigra in Parkinson's Disease**  
*Ashley K. Lotfipour, Samuel Wharton, Stefan T. Schwarz, V. Gontu, Andreas Schäfer, Andrew M. Peters, Richard W. Bowtell, Dorothee P. Auer, Penny A. Gowland, and Nin P.S. Bajaj*
- 56 **Comparison of 3 Tesla Proton MR Spectroscopy, MR Perfusion and MR Diffusion for Distinguishing Glioma Recurrence From Posttreatment Effects**  
*James R. Fink, Robert B. Carr, Eiji Matsusue, Ramesh S. Iyer, Jason K. Rockhill, David R. Haynor, and Kenneth R. Maravilla*
- 64 **Prediction of Illness Severity in Patients With Major Depression Using Structural MR Brain Scans**  
*Benson Mwangi, Keith Matthews, and J. Douglas Steele*
- Cardiovascular Imaging**
- 72 **Accuracy of MRI to Identify the Coronary Artery Plaque: A Comparative Study With Intravascular Ultrasound**  
*Yi He, Zhaoqi Zhang, Qinyi Dai, Yujie Zhou, Ya Yang, Wei Yu, Jing An, Lixin Jin, Renate Jerecic, Chun Yuan, and Debiao Li*
- 79 **Impaired Regional Left Ventricular Strain After Repair of Tetralogy of Fallot**  
*Karen G. Ordovas, Marcus Carlsson, Katy E. Lease, Elyse Foster, Alison K. Meadows, Alastair J. Martin, Michael Hope, Loi Do, Charles B. Higgins, and Maythem Saeed*
- Thoracic Imaging**
- 86 **Value of Oxygen-Enhanced MRI of the Lungs in Patients With Pulmonary Hypertension: A Qualitative and Quantitative Approach**  
*Daniel Maxien, Olaf Dietrich, Sven F. Thieme, Stefan Förster, Jürgen Behr, Maximilian F. Reiser, and Konstantin Nikolaou*
- Gastrointestinal Imaging**
- 95 **Characterization of Adrenal Lesions Using Chemical Shift MRI: Comparison Between 1.5 Tesla and Two Echo Time Pair Selection at 3.0 Tesla MRI**  
*Shinichi Nakamura, Tomohiro Namimoto, Kosuke Morita, Daisuke Utsunomiya, Seitaro Oda, Takeshi Nakaura, Toshinori Hirai, and Yasuyuki Yamashita*
- 103 **Liver Diffusivity in Healthy Volunteers and Patients With Chronic Liver Disease: Comparison of Breathhold and Free-Breathing Techniques**  
*Mamak Eatesam, Susan M. Noworolski, Phyllis C. Tien, Michelle Nystrom, Jennifer L. Dodge, Raphael B. Merriman, and Aliya Gayyum*
- 110 **Predicting Response to Neoadjuvant Chemoradiation Therapy in Locally Advanced Rectal Cancer: Diffusion-Weighted 3 Tesla MR Imaging**  
*Se Hee Jung, Suk Hee Heo, Jin Woong Kim, Yong Yeon Jeong, Sang Soo Shin, Min-Gyu Soung, Heong Rok Kim, and Heoung Keun Kang*

- 117 Does Vertebral Bone Marrow Fat Content Correlate With Abdominal Adipose Tissue, Lumbar Spine Bone Mineral Density, and Blood Biomarkers in Women With Type 2 Diabetes Mellitus?**  
*Thomas Baum, Samuel P. Yap, Dimitrios C. Karampinos, Lorenzo Nardo, Daniel Kuo, Andrew J. Burghardt, Umesh B. Masharani, Ann V. Schwartz, Xiaojuan Li, and Thomas M. Link*
- 125 Diffusion-Weighted MRI: Role in Detecting Abdominopelvic Internal Fistulas and Sinus Tracts**  
*Christine Schmid-Tannwald, Garima Agrawal, Farid Dahi, Ila Sethi, and Aytekin Oto*
- 132 Gadoteric Acid Disodium-Enhanced Hepatocyte Phase MRI: Can Increasing the Flip Angle Improve Focal Liver Lesion Detection?**  
*Hiroki Haradome, Luigi Grazioli, Khalid Al manea, Mika Tsunoo, Utaroh Motosugi, Thomas C. Kwee, and Taro Takaraha*
- 140 Effect of Disease Progression on Liver Apparent Diffusion Coefficient and T<sub>2</sub> Values in a Murine Model of Hepatic Fibrosis at 11.7 Tesla MRI**  
*Stephan W. Anderson, Hernan Jara, Al Ozonoff, Michael O'Brien, James A. Hamilton, and Jorge A. Soto*
- Musculoskeletal Imaging 147 T<sub>1ρ</sub> and T<sub>2</sub> Mapping Reveal the In Vivo Extracellular Matrix of Articular Cartilage**  
*Hiroaki Nishioka, Jun Hirose, Eiichi Nakamura, Yasunari Oniki, Koji Takada, Yasuyuki Yamashita, and Hiroshi Mizuta*
- Vascular Imaging 156 Automatic Lumen and Outer Wall Segmentation of the Carotid Artery Using Deformable Three-Dimensional Models in MR Angiography and Vessel Wall Images**  
*Ronald van 't Klooster, Patrick J.H. de Koning, Reza Alizadeh Dehnavi, Jouke T. Tamsma, Albert de Roos, Johan H.C. Reiber, and Rob J. van der Geest*
- Magnetic Resonance Spectroscopy 166 Reproducibility of 3D <sup>1</sup>H MR Spectroscopic Imaging of the Prostate at 1.5T**  
*Miriam W. Lagemaat, Christian M. Zechmann, Jurgen J. Fütterer, Elisabeth Weiland, Jianping Lu, Geert M. Villeirs, Barbara A. Holshouser, Paul van Hecke, Marc Lemort, Heinz-Peter Schlemmer, Jelle O. Barentsz, Stefan O. Roell, Arend Heerschap, and Tom W.J. Scheenen*
- Technical Developments 174 Metabolic Changes in Early Childhood Using LCModel With Corrected Water Scaling Method**  
*Jun-ichi Takanashi, Fuminori Somazawa, Katsuya Maruyama, Hitoshi Terada, Duan Xu, and A. James Barkovich*
- 181 Estimating Non-Gaussian Diffusion Model Parameters in the Presence of Physiological Noise and Rician Signal Bias**  
*Anders Kristoffersen*
- 
- Technical Notes**
- 190 Four-Dimensional Flow-Sensitive MRI of the Thoracic Aorta: 12- Versus 32-Channel Coil Arrays**  
*Aurélien F. Stalder, Zhiyuan Dong, Qi Yang, Jelena Bock, Jürgen Hennig, Michael Markl, and Kuncheng Li*
- 196 DCE-MRI Model Selection for Investigating Disruption of Microvascular Function in Livers With Metastatic Disease**  
*Anita Banerji, Josephine H. Naish, Yvonne Watson, Gordon C. Jayson, Giovanni A. Buonaccorsi, and Geoffrey J.M. Parker*
- 204 High-Resolution Ultrashort Echo Time (UTE) Imaging on Human Knee With AWSOS Sequence at 3.0 T**  
*Yongxian Qian, Ashley A. Williams, Constance R. Chu, and Fernando E. Boada*
- 211 Quantitative Characterization of Bone Marrow Edema Pattern in Rheumatoid Arthritis Using 3 Tesla MRI**  
*Xiaojuan Li, Andrew Yu, Warapat Virayavanich, Susan M. Noworolski, Thomas M. Link, and John Imboden*

**218 MRI of the Proximal Femur Predicts Marrow Cellularity and the Number of Mesenchymal Stem Cells**

*Kuen Tak Suh, Jae Min Ahn, Jung Sub Lee, Jung Yun Bae, In Suk Lee, Hak Jin Kim, and Jin Sup Jung*

**223 Pseudo-Random Arterial Modulation (PRAM): A Novel Arterial Spin Labeling Approach to Measure Flow and Blood Transit Times**

*Mohammad-Reza Taei-Tehrani, Matthias J.P. Van Osch, and Truman R. Brown*

**229 Measuring  $T_2$  In Vivo With J-Difference Editing: Application to GABA at 3 Tesla**

*Richard A.E. Edden, Jarunee Intrapiromkul, He Zhu, Ying Cheng, and Peter B. Barker*

**Letter to the Editor**

---

**235 Comment on: Effects of Static Magnetic Fields on Cognition, Vital Signs, and Sensory Perception: A Meta-Analysis**

*Frank de Vocht, Tobias Stevens, and Hans Kromhout*

**237 Response**

*Angela Heinrich, Anne Szostek, Frauke Nees, Patric Meyer, Herta Flor, and Wolfhard Semmler*

Volume 35, Number 1 was mailed the week of December 19, 2011