

Reviews

1299 MR Imaging of Urinary Bladder Cancer for T-Staging: A Review and a Pictorial Essay of Diffusion-Weighted Imaging

Mitsuru Takeuchi, Shigeru Sasaki, Taku Naiki, Noriyasu Kawai, Kenjiro Kohri, Masaki Hara, and Yuta Shibamoto

1310 Sclerotic Lesions of the Spine: MRI Assessment

Charles Muger, Kyung J. Suh, Thierry A.G.M. Huisman, Kristi Weber, Allan J. Belzberg, John A. Carrino, and Avneesh Chhabra

Original Research

Abdominal Imaging

1325 Respiratory-Induced 3D Deformations of the Renal Arteries Quantified With Geometric Modeling During Inspiration and Expiration Breath-Holds of Magnetic Resonance Angiography

Ga-Young Suh, Gilwoo Choi, Mary T. Draney, Robert J. Herfkens, Ronald L. Dalman, and Christopher P. Cheng

1333 Differentiating Hepatic Abscess From Malignant Mimickers: Value of Diffusion-Weighted Imaging With an Emphasis on the Periphery of the Lesion

Hyun Jeong Park, Seong Hyun Kim, Kyung Mi Jang, Soon Jin Lee, Min Jung Park, and Dongil Choi

1342 Fetal Liver T2* Values: Defining a Standardized Scale

Orly Goitein, Yael Eshet, Chen Hoffmann, Lisa Raviv-Zilka, Yishay Salem, Ashraf Hamdan, David Goitein, Tamar Kushnir, Iris Eshed, Elio Di-Segni, and Eli Konen

Breast Imaging

1346 In Vivo Identification of Sentinel Lymph Nodes Using MRI and Size-Controlled and Monodispersed Magnetite Nanoparticles

Shuji Iida, Kensuke Imai, Sachiko Matsuda, Osamu Itano, Mamoru Hatakeyama, Satoshi Sakamoto, Daisuke Kokuryo, Koji Okabayashi, Takashi Endo, Yoshiyuki Ishii, Hirotochi Hasegawa, Ichio Aoki, Hiroshi Handa, and Yuko Kitagawa

Cardiovascular Imaging

1356 Higher Dose Dobutamine Stress MR Imaging in Repaired Tetralogy of Fallot: Observer Variance of Volumetric Assessment Compared With Normal Volunteers

Victoria Parish, Israel Valverde, Shelby Kutty, Catherine Head, Gerald F. Greil, Tobias Schaeffter, Reza Razavi, and Philipp Beerbaum

1362 Three-Dimensional Dixon Fat-Water Separated Rapid Breathheld Imaging of Myocardial Infarction

Manojkumar Saranathan and James Glockner

1369 Validation of Sub-Segmental Visual Scoring for the Quantification of Ischemic and Nonischemic Myocardial Fibrosis Using Late Gadolinium Enhancement MRI

Nowell M. Fine, Shruti Tandon, Han W. Kim, Dipan J. Shah, Terry Thompson, Maria Drangova, and James A. White

1377 Cardiac Diffusion-weighted MR Imaging in Recent, Subacute, and Chronic Myocardial Infarction: A Pilot Study

Jean-Pierre Laissy, Virginia Gaxotte, Elisabeth Ironde-Laissy, Isabelle Klein, Aurélie Ribet, Ahmed Bendriss, Sylvie Chillon, Elisabeth Schouman-Claeys, P. Gabriel Steg, and Jean-Michel Serfaty

1388 Late Gadolinium Enhancement in the Assessment of the Infarcted Mouse Heart: A Longitudinal Comparison With Manganese-Enhanced MRI

Kristine Skårdal, Natale P.L. Rolim, Olav Haraldseth, Pål Erik Goa, and Marte Thuen

1395 Evaluation of Nonscarred Myocardial T1 Value Using Contrast-Enhanced Look-Locker Cardiac MRI and Its Relationship to Cardiac Function in Dilated Cardiomyopathy: Comparison of 1.5 and 3.0 Tesla MRI

Masaki Tachi, Yasuo Amano, Yasuhiro Kobayashi, Kyoichi Mizuno, and Shinichiro Kumita

Musculoskeletal Imaging 1402 Analysis of Quantitative Magnetic Resonance Imaging and Biomechanical Parameters on Human Discs With Different Grades of Degeneration

John Antoniou, Laura M. Epure, Arthur J. Michalek, Michael P. Grant, James C. Iatridis, and Fackson Mwale

1415 T₂ Relaxation Time Measurements Are Limited in Monitoring Progression, Once Advanced Cartilage Defects at the Knee Occur: Longitudinal Data From the Osteoarthritis Initiative

Pia M. Jungmann, Mareen S. Kraus, Lorenzo Nardo, Hans Liebl, Hamza Alizai, Gabby B. Joseph, Felix Liu, John Lynch, Chuck E. McCulloch, Michael C. Nevitt, and Thomas M. Link

1425 Measurement of Interscapular Brown Adipose Tissue of Mice in Differentially Housed Temperatures by Chemical-Shift-Encoded Water-Fat MRI

Daniel L. Smith Jr., Yongbin Yang, Houchun H. Hu, Guihua Zhai, and Tim R. Nagy

Neuroimaging

1434 Optimized Quantification of Diffusional Non-Gaussianity in the Human Brain

Anders Kristoffersen

1445 Multicenter Measurements of Myelin Water Fraction and Geometric Mean T₂: Intra- and Intersite Reproducibility

Sandra M. Meyers, Irene M. Vavasour, Burkhard Mädler, Trudy Harris, Eric Fu, David K.B. Li, Anthony L. Traboulsee, Alex L. MacKay, and Cornelia Laule

1454 Within-Lesion Differences in Quantitative MRI Parameters Predict Contrast Enhancement in Multiple Sclerosis

Alina Jurcoane, Marlies Wagner, Christoph Schmidt, Christoph Mayer, Rene-Maxime Gracien, Marc Hirschmann, Ralf Deichmann, Steffen Volz, Ulf Ziemann, and Elke Hattingen

1462 Comparison of Temperature Processing Methods for Monitoring Focused Ultrasound Ablation in the Brain

Viola Rieke, Ron Instrella, Jarrett Rosenberg, William Grissom, Beat Werner, Ernst Martin, and Kim Butts Pauly

1472 Brain Iron MRI: A Biomarker for Amyotrophic Lateral Sclerosis

Aleksandar Ignjatović, Zorica Stević, Slobodan Lavrnjić, Marko Daković, and Goran Bačić

1480 Effects of Age and Sex on the Concentrations of Glutamate and Glutamine in the Human Brain

Sven Hädel, Christoph Wirth, Michael Rapp, Jürgen Gallinat, and Florian Schubert

1488 Diffusion Tensor MRI Evaluation of the Corona Radiata, Cingulate Gyri, and Corpus Callosum in HIV Patients

Sarah C.B. Leite, Diogo G. Corrêa, Thomas M. Doring, Tadeu T.A. Kubo, Tania M. Netto, Rafael Ferracini, Nina Ventura, Paulo R.V. Bahia, and Emerson L. Gasparetto

Pelvic Imaging

1494 Diffusion Tensor Imaging (DTI) of the Normal Human Uterus In Vivo at 3 Tesla: Comparison of DTI Parameters in the Different Uterine Layers

Koji Fujimoto, Aki Kido, Tomohisa Okada, Masato Uchikoshi, and Kaori Togashi

1501 Quantitative Multiparametric MRI of Ovarian Cancer

Jori S. Carter, Joseph S. Koopmeiners, Jessica E. Kuehn-Hajder, Gregory J. Metzger, Navneeth Lakkadi, Levi S. Downs Jr, and Patrick J. Bolan

Physics

1510 Crushed Rephased Orthogonal Slice Selection (CROSS) for Simultaneous Acquisition of Two Orthogonal Proton Resonance Frequency Temperature Maps

Axel J. Krafft, Jaane Rauschenberg, Florian Maier, Jürgen W. Jenne, and Michael Bock

Thoracic Imaging

1521 Hyperpolarized ^3He and ^{129}Xe MRI: Differences in Asthma Before Bronchodilation

Sarah Svenningsen, Miranda Kirby, Danielle Starr, Del Leary, Andrew Wheatley, Geoffrey N. Maksym, David G. McCormack, and Grace Parraga

Vascular Imaging

1531 Comparison of Quiescent Inflow Single-Shot and Native Space for Nonenhanced Peripheral MR Angiography

Emily V. Ward, Mauricio S. Galizia, Asad Usman, Andrada R. Popescu, Eugene Dunkle, and Robert R. Edelman

1539 Noncontrast-Enhanced Magnetic Resonance Angiography and Venography Imaging With Enhanced Angiography

Yongquan Ye, Jiani Hu, Dongmei Wu, and E. Mark Haacke

Technical Notes

1549 MR Elastography of the Human Abdominal Aorta: A Preliminary Study

Lei Xu, Jun Chen, Kevin J. Glaser, Meng Yin, Phillip J. Rossman, and Richard L. Ehman

1554 Modeling DCE-MRI at Low Temporal Resolution: A Case Study on Rheumatoid Arthritis

Joseph R. Ledsam, Richard Hodgson, Robert J. Moots, and Steven P. Sourbron

1564 MR Thermometry in the Human Prostate Gland at 3.0T for Transurethral Ultrasound Therapy

Elizabeth Ramsay, Charles Mougnot, Max Köhler, Michael Bronskill, Laurence Klotz, Masoom A. Haider, and Rajiv Chopra

1572 Free Breathing Three-Dimensional Gradient Echo-Sequence With Radial Data Sampling (Radial 3D-GRE) Examination of the Pancreas: Comparison With Standard 3D-GRE Volumetric Interpolated Breathhold Examination (VIBE)

Saraporn Bamrungchart, Engy M. Tantaway, Esin C. Midia, Mateus A. Hernandez, Saowanee Srirattanapong, Brian M. Dale, and Richard C. Semelka

1578 Water-Fat MRI for Assessing Changes in Bone Marrow Composition Due to Radiation and Chemotherapy in Gynecologic Cancer Patients

Patrick J. Bolan, Luke Arentsen, Thanasak Sueblinvong, Yan Zhang, Steen Moeller, Jori S. Carter, Levi S. Downs, Jr., Rahel Ghebre, Douglas Yee, Jerry Froelich, and Susanta Hui

1585 Liver Iron Quantification by 3 Tesla MRI: Calibration on a Rabbit Model

Peng Peng, Zhongkui Huang, Liling Long, Fanyu Zhao, Chunyan Li, Wenmei Li, and Taigang He

1591 Markedly Increased Volume of Distribution of Gadolinium in Cardiac Amyloidosis Demonstrated by T_1 Mapping

Jeremy Brooks, Christopher M. Kramer, and Michael Salerno