

CLINICAL IMAGING

VOLUME 80, December 2021

Contents

EDITORIAL

- 290 **Simplified PI-RADS-based biparametric MRI: A rationale for detecting and managing prostate cancer**
Michele Scialpi

BODY IMAGING

- 6 **Frequency and significance of incidental liver lesions on MR enterography in adult patients**
Bari Dane, Craig Bearison and Sooah Kim
- 36 **Diffusion-weighted imaging versus dynamic contrast-enhanced imaging for pre-operative diagnosis of deep myometrial invasion in endometrial cancer: A meta-analysis**
Li-Jen Wang, Yi-Ju Tseng, Nicole Kessa Wee, Jeffrey Jen Hui Low and Cher Heng Tan
- 50 **Quantifying magnetic resonance imaging features to classify placenta accreta spectrum (PAS) in high-risk gravid patients**
Caiting Chu, Ming Liu, Yuzheng Zhang, Lingwei Yu, Dengbin Wang, Chengjin Gao and Wenhua Li
- 88 **Review of COVID-19, part 1: Abdominal manifestations in adults and multisystem inflammatory syndrome in children**
Devaraju Kanmaniraja, Jessica Kurian, Justin Holder, Molly Somberg Gunther, Victoria Chernyak, Kevin Hsu, Jimmy Lee, Andrew McClelland, Shira E. Slasky, Jenna Le and Zina J. Ricci
- 117 **Evaluation of the LI-RADS treatment response algorithm in hepatocellular carcinoma after trans-arterial chemoembolization**
Andrea S. Kierans, Marc Najjar, Silvina P. Dutruel, Alexander Gavlin, Christine Chen, Michael J. Lee, Gulce Askin and Karim J. Halazun
- 131 **Contrast agent retention features in contrast-enhanced ultrasound: diagnostic performance for the prediction of papillary thyroid carcinoma**
Zhuang Jin, Yaqiong Zhu, Fang Xie, Yan Zhang, Nan Li, Yukun Luo and Junying Cao
- 145 **Idiopathic pyometra in a postmenopausal patient**
Christopher C. Zarour, Kaitlin M. Zaki-Metias, Mehrvaan Kaur, Arooj Mian, Eda B. Olson and Stephen M. Seedial
- 180 **Foreign bodies of body orifices: A pictorial review**
Anas Saeed Bamaashmos, Ashkan Heshmetzadeh Behzadi, Kareem Elfatairy, Ayah Megahed, Puneet Kochar and Rahul Hegde
- 239 **A case of secondary sclerosing cholangitis due to COVID-19**
Shima Tafreshi, Ian Whiteside, Irving Levine and Catherine D'Agostino
- 304 **Focal hepatic intrinsically hyperattenuating lesions at unenhanced CT: Not always calcifications**
Francesco Agnello, Lidia Rabiolo, Federico Midiri, Giuseppe Lo Re, Emanuele Grassedonio, Ludovico La Grutta, Salvatore Buscemi, Antonino Agrusa and Massimo Galia

- 371 **Meaningful words in rectal MRI synoptic reports: How “polypoid” may be prognostic**
Jennifer S. Golia Pernicka, David D.B. Bates, James L. Fuqua III, Andrea Knezevic, Joongchul Yoon, Lorenzo Nardo, Iva Petkovska, Viktoriya Paroder, Garrett M. Nash, Arnold J. Markowitz and Marc J. Gollub
- 424 **Reliability of performing ultrasound derived SWE and fat fraction in adult livers**
Jing Gao, Candance Wong, Megan Maar and David Park
- 439 **Unveiling the unreal: Comprehensive imaging review of hepatic pseudolesions**
Subramaniyan Ramanathan, Vineetha Raghu, Vivek Virmani, Adnan Sheikh, Mahmoud Al Heidous and SreeHarsha Tirumani
- 454 **Which measurement method should be used for prostate volume for PI-RADS? A comparison of ellipsoid and segmentation methods**
Robert Colvin, David Walker, Jason Hafron, Brian Seifman, Sirisha Nandalur, David Gangwish and Kiran R. Nandalur

BREAST IMAGING

- 11 **Mode of detection matters: Differences in screen-detected versus symptomatic breast cancers**
Anna Starikov, Gulce Askin, Anthony Blackburn, Connie Moying Lu, Elizabeth Reznik, Julie Kim, Arpita Bose, Esther Cheng, Katerina Dodelzon and Elizabeth Kagan Arleo
- 19 **Modern radiation techniques in early stage breast cancer for the breast radiologist**
Brianna M. Jones and Sheryl Green
- 83 **Unilateral axillary adenopathy in the setting of COVID-19 vaccine: Follow-up**
Nishi Mehta, Rachel Marcus Sales, Kemi Babagbemi, Allison D. Levy, Anika L. McGrath, Michele Drotman and Katerina Dodelzon
- 111 **Axillary adenopathy following COVID-19 vaccination: A single institution case series**
Heather Duke, Liana Posch and Lauren Green
- 123 **Artifacts in contrast-enhanced mammography: are there differences between vendors?**
Saish Neppalli, Meredith A. Kessell, Carolyn R. Madeley, Melissa L. Hill, Philip S. Vlaskovsky and Donna B. Taylor
- 139 **COVID-19 vaccine-related unilateral axillary lymphadenopathy: Pattern on screening breast MRI allowing for a benign assessment**
Michael J. Plaza, Jervon Wright and Sara Fernandez
- 202 **Mammographic and sonographic findings in the breast and axillary tail following a COVID-19 vaccine**
Jasmine N. Locklin and Genevieve A. Woodard
- 205 **Patients characteristics related to screening mammography cancellation and rescheduling rates during the COVID-19 pandemic**
Nita Amornsiripanitch, Sona A. Chikarmane, Camden P. Bay and Catherine S. Giess
- 211 **Adding value in the era of COVID-19: Increasing usage of a patient-centered radiology consultation service**
Melissa Reichman, Elizabeth Kagan Arleo, Robert J. Min, Keith Hentel, Meghan Cahill, Tara Ruddy, Deirdre Sullivan and Michele Drotman

- 283 **Breast imaging in transgender women: a review**
Thomas Lienhoop and Lauren Green
- 315 **BI-RADS 3 on dense breast screening ultrasound after digital mammography versus digital breast tomosynthesis**
Elizabeth H. Dibble, Tisha M. Singer, Grayson L. Baird and Ana P. Lourenco
- 359 **Outcomes of screening mammography performed prior to fertility treatment in women ages 40-49**
Heather I. Greenwood, Elissa R. Price, Amie Y. Lee, Tatiana Kelil, Camille Jones, Mai Le and Eleni G. Jaswa
- 364 **Accuracy of contrast-enhanced spectral mammography compared with MRI for invasive breast cancers: Prospective study in population of predominantly underrepresented minorities**
Sandy C. Lee, Linda Hovanessian-Larsen, Daniel Stahl, Steven Cen, Xiaomeng Lei, Bhushan Desai and Mary Yamashita
- 391 **Recalibrating the decision for MRI-directed breast ultrasound in patients with newly diagnosed breast cancer, factors predicting sonographic success**
Santo Maimone, Andrey P. Morozov, Zhuo Li, Emily C. Craver, Erin A. Elder and Sarah A. McLaughlin
- 400 **Use of non-contrast MR in diagnosing secondary lymphedema of the upper extremities**
Geunwon Kim, Kevin Donohoe, Martin P. Smith, Ryoko Hamaguchi, Anna Rose Johnson, Dhruv Singhal and Leo L. Tsai
- 430 **Screening mammography mitigates breast cancer disparities through early detection of triple negative breast cancer**
Solange Bayard, Genevieve Fasano, Yalei Chen, Melissa Davis, Michele Drotman, Jessica Bensenhaver, Alexander Swistel, Rache Simmons, Jennifer Marti and Lisa Newman

CARDIOTHORACIC IMAGING

- 1 **Role of hepatosteatosis in the prognosis of COVID 19 disease**
Mahmut Çoraplı, Ercan Çil, Cemil Oktay, Hüseyin Kaçmaz, Gökhan Çoraplı and Hacı Taner Bulut
- 58 **Comparison of deep learning, radiomics and subjective assessment of chest CT findings in SARS-CoV-2 pneumonia**
Chiara Arru, Shadi Ebrahimian, Zeno Falaschi, Jacob Valentin Hansen, Alessio Pasche, Mads Dam Lyhne, Mathis Zimmermann, Felix Durlak, Matthias Mitschke, Alessandro Carriero, Jens Erik Nielsen-Kudsk, Mannudeep K. Kalra and Luca Saba
- 158 **Pulmonary infarcts in COVID-19**
Mary M. Salvatore
- 193 **Aorta-cameral fistulas: Spectrum of CT findings and review**
Saurabh Agarwal and Michael K. Atalay
- 229 **Systematic review and meta-analysis of chest radiograph (CXR) findings in COVID-19**
Zuhair Sadiq, Shehroz Rana, Ziyad Mahfoud and Ameer Raof
- 334 **Review of multi-modality imaging update and diagnostic work up of Takotsubo cardiomyopathy**
Sarv Priya, Prashant Nagpal, Tanya Aggarwal, James Huynh, Kanika Khandelwal and Ashish Khandelwal

MOLECULAR IMAGING AND NUCLEAR MEDICINE

- 262 **FDG PET/CT imaging features and clinical utility in COVID-19**
Randy Yeh, Ahmed Elsakka, Rick Wray, Rocio Perez Johnston,
Natalie C. Gangai, Hooman Yarmohammadi, Heiko Schoder and
Neeta Pandit-Taskar

MUSCULOSKELETAL AND EMERGENCY IMAGING

- 26 **CT evaluation of self-induced and retained foreign bodies in the abdomen and pelvis**
Carolina Lugo-Fagundo, Nevil Ghodasara, Elliot K. Fishman and
Javad R. Azadi
- 77 **Increased per-patient imaging utilization in an emergency department setting during COVID-19**
Marc D. Succi, Ken Chang, Thomas An, David A. Rosman, Ali S. Raja,
Michael S. Gee, Michael H. Lev, Ray Liu, Sanjay Saini and James A. Brink
- 150 **MRI study of changes in knee bone marrow edema-like signal in asymptomatic amateur marathon runners before and after half-marathon running**
Yi Zhang, Dingbo Shu, Wanzhen Yao, Jianping Ding, Leilei Chen,
Xiaoying Lin, Tian Tian and Jie Liu
- 167 **Imaging of facet joint diseases**
Robert M. Kwee and Thomas C. Kwee
- 215 **Imaging features of hypercalcemia: A primer for emergency radiologists**
Angela Spierling, Elias G. Kikano, Kaushik Chagarlamudi, Derek Vos,
Sanjay Rao, Daniel A. Smith and Nikhil H. Ramaiya
- 249 **Uniquely pediatric upper extremity injuries**
Helen H.R. Kim, Sarah J. Menashe, Anh-Vu Ngo, Jeffrey P. Otjen,
Ezekiel Maloney, Ramesh S. Iyer and Mahesh Thapa
- 382 **Opportunistic CT screening of osteoporosis on thoracic and lumbar spine: a meta-analysis**
Yeqing Zhu, Natthaya Triphuridet, Rowena Yip, Betsy J. Becker, Yong Wang,
David F. Yankelevitz and Claudia I. Henschke
- 406 **Postsurgical status of articular cartilage after arthroscopic posterior cruciate ligament reconstruction in patients with or without concomitant meniscal pathology**
Myung Sub Kim, Hee Jin Park, Ji Na Kim, Mi Ran Jeon, Eugene Kim,
Jai Hyung Park and Yong Taek Lee

NEURORADIOLOGY

- 67 **Circumferential segmental vessel-wall enhancement on black blood MRI in patients referred for the evaluation of vasculopathy**
Durga Sivacharan Gaddam, Gordon Crews, Timothy Chryssikos,
Dheeraj Gandhi, Robert Morales, Jiachen Zhuo, Ranyah Almardawi and
Prashant Raghavan
- 148 **A little consideration for "Rare presentations of COVID-19: PRES-like leukoencephalopathy and carotid thrombosis"**
Dongren Sun, Hengshu Chen, Yeqing Xiao, Weiye Xu, Fan Liu, Shihang Luo
and Fafa Tian
- 329 **Neurolymphomatosis; a case report**
Noha Aboueldahab, Mohamed Ahmed Shafik, Ayah Megahed and
Hubert Vesselle

- 348 **Neurological symptoms and neuroimaging alterations related with COVID-19 vaccine: Cause or coincidence?**
Diogo Goulart Corrêa, Luis Alcides Quevedo Cañete,
Gutemberg Augusto Cruz dos Santos, Romulo Varella de Oliveira,
Carlos Otávio Brandão and Luiz Celso Hygino da Cruz Jr
- 377 **Post-dural puncture pseudomeningocele (“arachnoid bleb”): An underrecognized etiology of spontaneous intracranial hypotension symptomatology**
Michelle Roytman, Christian T. Ulrich and J. Levi Chazen

PRACTICE, POLICY & EDUCATION

- 16 **A lactation credit model to support breastfeeding in radiology: The new gold standard to support “liquid gold”**
Kristin K. Porter, Elizabeth Kagan Arleo, Lucy B. Spalluto, Geraldine McGinty and Christopher P. Hess
- 142 **Will I make a difference? Practical pointers for trainees interested in global radiology**
Joseph A. Adedigba and Geraldine B. McGinty
- 199 **Scholarly opportunities for medical students and residents in United States professional radiology organizations**
Jonathan P. Yasmeh, Orel Bakhshizadeh, Ariel M. Azhdam and Amir A. Hakimi
- 225 **Radiology resident selection factors predict resident performance**
Jeffrey R. Tseng, Young S. Kang, Jiwon Youm and Rajul Pandit
- 277 **Recovery of outpatient imaging utilization during the first wave of the COVID-19 pandemic**
Jason J. Naidich, Artem Boltyenkov, Jason J. Wang, Eric Cruzen, Jesse Chusid, Elizabeth Rula and Pina C. Sanelli
- 322 **Measuring interdisciplinarity of biomedical research, medical specialty performance, and implications for radiology: A retrospective review of 2.6 million citations**
Matthew B. Petterson, Colin Longhurst and John-Paul J. Yu
- 353 **American Association for Women in Radiology**
Carolynn M. DeBenedectis, Chelsea Schmitt, Kristin K. Porter and Carol Rumack
- 420 **Virtual medical student radiology clerkships during the COVID-19 pandemic: Distancing is not a barrier**
Susana Creagh, Nicolas Pigg, Claudia Gordillo and James Banks
- 438 **Letter to the Editor: Response**
Lily M. Belfi

PEDIATRIC RADIOLOGY

- 300 **Evaluating current chest imaging practices of pediatric patients with COVID-19: A retrospective analysis**
Vincent R. Li, Amit Sura and Trevor Pickering

VASCULAR AND INTERVENTIONAL RADIOLOGY

- 160 **Post-embolization outcomes of splenic artery pseudoaneurysms: A single-center experience**
Abhinav Talwar, Gabriel Knight, Ali Al Asadi, Pouya Entezari, Richard Chen, Scott Resnick, Sri Komanduri, Ahmed Gabr, Bartley Thornburg, Riad Salem and Ahsun Riaz

- 190 **Percutaneous evacuation of anterior abdominal wall hematomas using catheter-based mechanical thrombectomy**
Vibhor Wadhwa, William F. Browne and Marc H. Schiffman
- 243 **Inferior vena cava filter tilting between placement and retrieval is associated with caval diameter and need for complex retrieval techniques**
Grace L. Laidlaw, Jeffrey Forris Beecham Chick, Christopher R. Ingraham, Eric J. Monroe, Guy E. Johnson, Karim Valji and David S. Shin
- 274 **Superselective embolization in posttraumatic high-flow priapism**
Simarjeet Puri, John Swietlik, Orhan Ozkan and Mark Kleedehn
- 292 **Safety and technical efficacy of pre-operative embolization of head and neck paragangliomas: A 10-year mono-centric experience and systematic review**
Pierre De Marini, Michel Greget, Emanuele Boatta, Christine Jahn, Iulian Enescu, Julien Garnon, Danoob Dalili, Roberto Luigi Cazzato and Afshin Gangi

ARTIFICIAL INTELLIGENCE

- 43 **Diagnosis of thyroid cancer using a TI-RADS-based computer-aided diagnosis system: a multicenter retrospective study**
Zhuang Jin, Yaqiong Zhu, Shijie Zhang, Fang Xie, Mingbo Zhang, Yanli Guo, Hui Wang, Qiang Zhu, Junying Cao and Yukun Luo
- 72 **Understanding artificial intelligence based radiology studies: CNN architecture**
Simukayi Mutasa, Shawn Sun and Richard Ha
- 268 **Application of deep learning to identify COVID-19 infection in posteroanterior chest X-rays**
Jenish Maharjan, Jacob Calvert, Emily Pellegrini, Abigail Green-Saxena, Jana Hoffman, Andrea McCoy, Qingqing Mao and Ritankar Das
- 413 **Knowledge and attitudes towards artificial intelligence in imaging: a look at the quantitative survey literature**
Abhishta Bhandari, Sai Navya Purchuri, Chinmay Sharma, Muhammad Ibrahim and Marita Prior