RSNA Press Release

New Image Wisely Radiation Safety Case Available: C-arm Based Cone Beam CT in Interventional Radiology

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RESTON, Va. — The eighth Image Wisely® Radiation Safety Case — C-arm Based Cone Beam CT in Interventional Radiology — is now available to help radiologists, imaging technologists and medical physicists assess their understanding of important radiation safety concepts — including dose monitoring and optimization. This is the newest in a series of free, online and mobile-compatible Image Wisely educational offerings, developed with the assistance of the American College of Radiology (ACR).

This case explains the basic concepts of C-arm based cone-beam computed tomography (CBCT) and the differences in determining radiation dose between cone-beam CT and multidetector CT. "C-arm based CBCT— with its ability to depict vessels in multiple planes and also to show soft tissue contrast — has the potential to substantially improve the outcomes of interventional radiology procedures," said Sharjeel Sabir, MD, University of Texas MD Anderson Cancer Center in Houston, who co-authored the case with Kyle Jones, PhD, also of UT MD Anderson Cancer Center. "There are many benefits to C-arm based CBCT, but there is a learning curve involved for equipment setup. In addition, it is important for operators to think carefully about the radiation exposure to patients during C-arm based CBCT, since traditional dose metrics currently used in MDCT and fluoroscopy do not directly apply to CBCT."

Several radiation safety cases are presented throughout the year. Case content includes embedded questions that provide expert feedback as well as references and resources for further study. Continuing education credit for radiologists, imaging technologists and medical physicists is available. This case is directed primarily toward physicians, residents and interventional technologists.

"Care should be taken when performing CBCT scans to limit the number during a procedure to only those necessary for meaningful imaging and patient safety," said Donald J. Peck, PhD, FACR, director of the Image Wisely Radiation Safety Case series and member of the Image Wisely executive committee. "Imaging professionals are encouraged to complete these free radiation safety cases to reinforce their knowledge on these important topics," he added.

The eighth case, C-arm Based Cone Beam CT in Interventional Radiology, offers a total of 0.5 AMA PRA Category 1 Credits™; 0.5 MPCEC credits by the Commission on Accreditation of Medical Physics Education Programs, Inc.; and 0.5 Category A credits of the American Registry of Radiologic Technologists.
Image Wisely is an initiative of the ACR, the Radiological Society of North America, the American Association of Physicists in Medicine and the American Society of Radiologic Technologists with the objective of lowering the amount of radiation used in medically necessary imaging studies and eliminating unnecessary procedures. Image Wisely offers resources and information to radiologists, medical physicists, other imaging practitioners and patients.

For additional information about Image Wisely, visit imagewisely.org.

To speak with an Image Wisely spokesperson, contact Shawn Farley at 703-869-0292, Maryann Verrillo at 703-390-9822 or PR@acr.org.

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