

EMERGENCY RADIOLOGY

104TH Scientific Assembly and Annual Meeting

Radiological Society of North America
McCormick Place, Chicago

November 25–30

Meeting.RSNA.org #RSNA18

RSNA[®] 2018
TOMORROW'S
RADIOLOGY TODAY 

Accreditation and Designation Statements

The Radiological Society of North America (RSNA®) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The RSNA designates this live activity for a maximum of **99.25 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Commission on Accreditation of Medical Physics Education Program (CAMPEP) has approved the direct transfer of *AMA PRA Category 1 Credit™* to MPCEC on a credit-for-credit basis for medical physicists.

Corporate Symposium

Please refer to each course description in the online program to determine if CME credit is offered for the session. Instructions on claiming credit will be provided during the course. CME credit for the Corporate Symposiums will be provided through a third party provider and not through RSNA.

Walk Through The Week

SUNDAY, NOV 25, 2018

Case of the Day

Emergency Radiology Sunday Case of the Day

Session ED004-SU Case of Day, Learning Center

10:45 AM—12:15 PM

Scientific Papers Sessions

Science Session with Keynote: Emergency Radiology (Imaging Algorithms, Modalities and Techniques)

Session SSA06 S405AB

12:30—1:00 PM

Posters and Exhibits: Discussions

Emergency Radiology Sunday Poster Discussions

Session ERS-SUA ER Community, Learning Center

1:00—1:30 PM

Posters and Exhibits: Discussions

Emergency Radiology Sunday Poster Discussions

Session ERS-SUB ER Community, Learning Center

2:00—3:30 PM

Educational Courses

Imaging of Musculoskeletal Injuries (Interactive Session)

Course RC108 E451B

MONDAY, NOV 26, 2018

Case of the Day

Emergency Radiology Monday Case of the Day

Session ED004-MO Case of Day, Learning Center

8:30—10:00 AM

Educational Courses

Emergency Neuroradiology: Imaging of Infection (Interactive Session)

Course RC208 E451A

10:30 AM—12:00 PM

Scientific Papers Sessions

Emergency Radiology (Thoracic, Cardiac and Vascular)

Session SSC04 S504AB

Neuroradiology/Head and Neck (Trauma Imaging: Picking Up the Pieces)

Session SSC11 S402AB

12:15—12:45 PM**Posters and Exhibits: Discussions**

Emergency Radiology Monday Poster Discussions

Session ERS-MOAER Community, Learning Center**12:45—1:15 PM****Posters and Exhibits: Discussions**

Emergency Radiology Monday Poster Discussions

Session ERS-MOB.ER Community, Learning Center**1:30—3:00 PM****Educational Courses**

Case-based Review of the Abdomen (Interactive Session)

Course MSCA21 S100AB**3:00—4:00 PM****Scientific Papers Sessions**

Science Session with Keynote: Emergency Radiology

(Forensic and Musculoskeletal Imaging)

Session SSE06 E353A**TUESDAY, NOV 27, 2018****Case of the Day**

Emergency Radiology Tuesday Case of the Day

Session ED004-TUCase of Day, Learning Center**7:15—8:15 AM****Educational Courses**

The RAD Files: The Truth is Out There (Case-based Competition)

Session SPDL30E451B**8:30—10:00 AM****Educational Courses**

Current Imaging of the Appendix

Course RC308. E353C**10:30 AM—12:00 PM****Scientific Papers Sessions**

Emergency Radiology (Brain, Head, Neck and Spine)

Session SSG04. S403A**12:15—12:45 PM****Posters and Exhibits: Discussions**

Emergency Radiology Tuesday Poster Discussions

Session ERS-TUAER Community, Learning Center

12:45—1:15 PM**Posters and Exhibits: Discussions**

Emergency Radiology Tuesday Poster Discussions

Session ERS-TUBER Community, Learning Center**3:00—4:00 PM****Scientific Papers Sessions**Science Session with Keynote: Emergency Radiology
(Practice Management)**Session SSJ06S402AB****4:30—6:00 PM****Educational Courses**

Emergency Ultrasound Pitfalls

Course RC408. S102CDThe New Standard of Care of Large Vessel Stroke is
Endovascular: Is Your Radiology Practice Ready?**Course RC431 S103CD****WEDNESDAY, NOV 28, 2018****Case of the Day**

Emergency Radiology Wednesday Case of the Day

Session ED004-WE.Case of Day, Learning Center**8:30 AM—12:00 PM****Educational Courses**

Neuroradiology Series: Stroke

Course RC505. E450AEmergency Radiology Series: Contemporary Topics in Imaging
of Trauma**Course RC508. S406B****8:30—10:00 AM****Educational Courses**RSNA/ESR Sports Imaging Symposium: Upper Extremity
Sports Injuries**Course MSSR41.E352****10:30 AM—12:00 PM****Educational Courses**RSNA/ESR Sports Imaging Symposium: Lower Extremity
Sports Injuries**Course MSSR42E352****10:30 AM—12:00 PM****Scientific Papers Sessions**

Neuroradiology (Stroke Imaging and Intervention)

Session SSK15 E350

12:15—12:45 PM**Posters and Exhibits: Discussions**

Emergency Radiology Wednesday Poster Discussions

Session ERS-WEAER Community, Learning Center**12:45—1:15 PM****Posters and Exhibits: Discussions**

Emergency Radiology Wednesday Poster Discussions

Session ERS-WEB.ER Community, Learning Center**1:30—3:00 PM****Educational Courses**RSNA/ESR Sports Imaging Symposium: Musculoskeletal
Interventional Procedures**Course MSSR43E352****3:00—4:00 PM****Scientific Papers Sessions**

Emergency Radiology (Abdomen and Pelvis Trauma)

Session SSM07.S404AB**3:30—5:00 PM****Educational Courses**Case-based Review of Thoracic Radiology (Interactive
Session)**Course MSCT42S406A**RSNA/ESR Sports Imaging Symposium: Postoperative
Imaging of Sports Injuries**Course MSSR44E352****THURSDAY, NOV 29, 2018****Case of the Day**

Emergency Radiology Thursday Case of the Day

Session ED004-THCase of Day, Learning Center**8:30 AM—12:00 PM****Educational Courses**Emergency Radiology Series: Current Imaging of the Acute
Abdomen**Course RC608.E451B****8:30—10:00 AM****Educational Courses**

Traumatic Brain Injury

Course RC605.E352**10:30 AM—12:00 PM****Educational Courses**

Essentials of Trauma Imaging

Course MSES52S406B

12:15–12:45 PM**Posters and Exhibits: Discussions**

Emergency Radiology Thursday Poster Discussions

Session ERS-THAER Community, Learning Center**12:45–1:15 PM****Posters and Exhibits: Discussions**

Emergency Radiology Thursday Poster Discussions

Session ERS-THBER Community, Learning Center**4:30–6:00 PM****Educational Courses**

12 AM Head & Neck Radiology: Emergency Presentations of Head and Neck Pathology

Course RC706 E350

Mass Casualty and Forensic Imaging: Thinking About the Unthinkable

Course RC708E352

Thoracic Aortic Emergencies (Interactive Session)

Course RC712 S103AB

Pediatric Neuroimaging Emergencies

Course RC713S404AB

Posters and Exhibits Discussions

*(CME is available when the author is present for discussion during the lunch period)***SUNDAY, NOV 25, 2018****12:30–1:00 PM****Scientific Posters**

The Impact of Socioeconomic Status on CT-Imaging and Management of Acute Appendicitis

ER203-SD-SUA4 Station #4

Ultra-Low Dose One-Shot CT Imaging of Abdomen on 320-Row Volume CT for Emergency Patients

ER200-SD-SUA1 Station #1

Utility of Ultrasound After a Negative CT in the Emergency Department - Does It Add Anything?

ER201-SD-SUA2 Station #2

Utility of Whole Survey Spine MRI in Blunt Trauma Patients Sustaining Single Level or Contiguous Spinal Fractures

ER202-SD-SUA3 Station #3

12:30—1:00 PM**Education Exhibits**

Pelvic Emergencies: The Role of MR Imaging in the
Emergency Department

ER158-ED-SUA5 Station #5

1:00—1:30 PM**Scientific Posters**

Doctors Knowledge of Doses and Risks of Radiological
Procedures Performed in Emergency Department

ER206-SD-SUB3 Station #3

Role of 24/7 Emergency Radiology, On-site Staff Radiologist
Coverage at a Level 1 Trauma Center, In Reducing the Turn
Around Time (TAT) for Acute Brain Computed Tomography
Scanning

ER205-SD-SUB2 Station #2

The Feasibility of Point-Of-Care Ankle Ultrasound Examination
in Patients with Recurrent Ankle Sprain and Chronic Ankle
Instability: Comparison with Magnetic Resonance Imaging

ER204-SD-SUB1. Station #1

1:00—1:30 PM**Education Exhibits**

Penile Emergencies: A Comprehensive Multi-Modality Imaging
Review

ER159-ED-SUB4 Station #4

MONDAY, NOV 26, 2018**12:15—12:45 PM****Scientific Posters**

3D-Surface Reconstructions (Cinematic Rendering) In
Postmortem CT after Stab Attacks: Diagnostic Performance
and Forensic Relevance of a Novel Cinematic Rendering
Software Compared to Conventional CT Images and Autopsy
Results

ER210-SD-MOA4 Station #4

CT Pulmonary Angiography and Portal Venous Phase
Abdomen and Pelvis CT Protocol Experience in the
Emergency Department

ER209-SD-MOA3 Station #3

Point-of-Care Wrist Ultrasonography in Trauma Patients with
Ulnar-Sided Pain and Instability

ER208-SD-MOA2 Station #2

Spontaneous Active Bleeding: Which Predictive Factors
Influence in the Therapeutic Decision?

ER207-SD-MOA1. Station #1

12:15–12:45 PM**Education Exhibits**

Dual Energy CT in Gastrointestinal Bleeding: Pearls and Pitfalls

ER160-ED-MOA5 Station #5

12:45–1:15 PM**Scientific Posters**

Abdominal Computed Tomography for Acute Appendicitis Is Necessary Even in Patients with an Equivocal Alvarado Score (3-6), in the Emergency Department

ER212-SD-MOB2. Station #2

Efficacy of Changing the Pitch in Single CT Scan Regarding the Reduction of the Pulsatile Motion Artifact at the Aortic Root Without Increasing the Image Noise

ER211-SD-MOB1 Station #1

MDCT Evaluation of Acute Lower Gastrointestinal Bleeding (LGIB)

ER213-SD-MOB3 Station #3

12:45–1:15 PM**Education Exhibits**

Abdominal Pain After ERCP: What Should We Look For?

ER161-ED-MOB4 Station #4

TUESDAY, NOV 27, 2018**12:15–12:45 PM****Scientific Posters**

Analysis of Imaging Findings of Patients Admitted to the Emergency Department with a Diagnosis of Seizure

ER217-SD-TUA3 Station #3

Optic Nerve Sheath Diameter as a Predictor of Acute Infarction in Patients with Acute Vertigo

ER215-SD-TUA1 Station #1

Ultrasound Findings of Strangulated Obstruction with Varied Ischemic Degrees

ER216-SD-TUA2 Station #2

12:15–12:45 PM**Education Exhibits**

Added Value of Dual Energy CT in Clinical Routine

ER162-ED-TUA4 Station #4

12:45—1:15 PM

Scientific Posters

Diagnostic Performance and Essential Imaging Pulse Sequences of MRI for Acute Abdominal Pain by Gastrointestinal Disorders

ER219-SD-TUB2 Station #2

Dual-Energy Head CT Accurately Distinguishes Small Foci of Intracranial Hemorrhage from Calcium: A Quantitative Analysis and Reader Study Validation

ER218-SD-TUB1 Station #1

Novel Post Processing CT Technique of “Rib Flattening and Spine Straightening”: An Aid in Accelerated and Efficient Detection of Fractures!— Single Institute Experience

ER221-SD-TUB4 Station #4

Whole Brain CT-Perfusion in the Emergency Room: Its Utility Beyond Acute Stroke

ER220-SD-TUB3 Station #3

12:45—1:15 PM

Education Exhibits

Dual Energy CT to The Rescue: How DECT Can Help in The Emergency Department

ER163-ED-TUB5 Station #5

WEDNESDAY, NOV 28, 2018

12:15—12:45 PM

Scientific Posters

Assessment of a Computer Decision Support System (CDSS) for Ordering Cardiac-CT Scan in Patients with Acute Chest Pain Based on Diamond-Forrest Pretest Probability

ER224-SD-WEA3 Station #3

Implementation of an Ultra-Low-Dose CT-Protocol for Extremities: Initial Experience with 106 Subjects

ER225-SD-WEA4 Station #4

Implementing 24/7 Onsite Cardiac Computed Tomography Angiography (CCTA) in the Emergency Department Impact on Patient Care: Retrospective Analysis of One Center Experience

ER223-SD-WEA2 Station #2

Rapid Imaging Protocol of the Bilateral MCA Territories for Thrombectomy in Acute Ischemic Stroke by 80-Row Area Detector CT

ER222-SD-WEA1 Station #1

12:15–12:45 PM**Education Exhibits**

Pancreatic Trauma: A Diagnosis Requiring a Multidisciplinary Approach

ER164-ED-WEA5. Station #5

12:45–1:15 PM**Scientific Posters**

Can We Adequately Select Patients with Chest Pain Who Consult in the Emergency Room to Perform Angiography Multidetector CT (MDCT) Coronary?

ER228-SD-WEB3 Station #3

Cardiac CT in the Emergency Department: Prevalence and Spectrum of Imaging Findings Beyond the Coronary Plaques

ER227-SD-WEB2 Station #2

Utility of 'Whole Brain' CT-Perfusion in Stroke of Less Frequent Territories

ER226-SD-WEB1. Station #1

12:45–1:15 PM**Education Exhibits**

Dual-Energy CT: Added-Value in Trauma

ER165-ED-WEB4. Station #4

THURSDAY, NOV 29, 2018**12:15–12:45 PM****Scientific Posters**

A Modern Phenomenon: Bicycle Versus Pedestrian Trauma within a Major Urban Trauma Center, Including a Review of Imaging Findings

ER229-SD-THA1 Station #1

Emergency CT for Assessment and Management of Blunt Traumatic Splenic Injuries at a Level-1 Trauma Center: 13-Year Study

ER231-SD-THA3 Station #3

Getting It Right the First Time: A Root Cause Analysis of Aborted and Suboptimal Body MRI Scans in the Emergency Department

ER232-SD-THA4. Station #4

Utility of Body CT in Patients with Head or Neck Injuries from Falls from Standing Height or Less

ER230-SD-THA2 Station #2

12:15–12:45 PM**Education Exhibits**

Pediatric Foot and Ankle Fractures: Patterns, Mimics, Complications, and Treatment

ER166-ED-THA5 Station #5

12:45—1:15 PM**Scientific Posters**

A Review of Clinical Practice from an Urban Emergency
Centre - Are We Imaging Pyelonephritis Appropriately?

ER233-SD-THB1 Station #1

Blunt Cerebrovascular Injury: 10-Year Experience at a Level I
Trauma Center

ER235-SD-THB3. Station #3

Parapharyngeal Gas as a CT Sentinel Sign of Skull Base
Fracture

ER234-SD-THB2. Station #2

Education Exhibits

SPACE NO.	EXHIBIT TITLE
ER001-EB-X	Face the Facial Injuries!
ER002-EB-X	The Mechanics of Cardiac Gated CTA in the ED for Suspected Aortic Dissection
ER003-EB-X	Dual Energy CT Enabled Bone Subtraction in the Diagnosis of Intracranial Pathology
ER004-EB-X	Visualization of Retained Surgical Items Using a Tissue Realistic 3D Printed Abdominal Trauma Phantom
ER005-EB-X	Time of Death: Traumatic and Non-Traumatic Review of Hypoperfusion Complex
ER006-EB-X	Evaluation of Acute Maxillofacial Injuries with 3D Cinematic Rendering: Initial Observations
ER007-EB-X	Pancreatic Trauma - Rare but Serious
ER008-EB-X	Trauma Head CT: Reduction of Beam Hardening and Blooming Artifacts Using Dual Energy and Virtual Monochromatic Imaging to Improve the Display of the Bone/Brain Interface
ER009-EB-X	Small Bowel Obstruction from Internal and External Hernias: An Approach to Imaging Interpretation
ER100-ED-X	MRI for Acute Abdomen: Selection of Appropriate Sequence and Image Interpretation
ER101-ED-X	Pain in the Neck: How to Systematically Read and Report an Emergency Neck CT
ER102-ED-X	The Many Faces of Right Lower Quadrant Pain: An Approach to MRI for Suspected Appendicitis
ER103-ED-X	Thoracic Abnormal Air Collections in Intensive-Care Unit: Radiograph Findings Correlated with CT
ER104-ED-X	Non-Contrast MRI of Acute Abdominopelvic Pain in Pregnancy: Pathology and Pearls
ER105-ED-X	Parasitic Diseases as a Cause of Acute Abdomen

ER106-ED-X	Gastrointestinal Obstruction: Beyond Adhesions and Colorectal Carcinomas
ER107-ED-X	Detecting and Quantifying Bone Marrow Edema in Knee Joint in Emergency CT: New Applications of Non-Enhanced Dual-Energy Spectral CT
ER108-ED-X	Emergent Complications of Cosmetic Surgery: A Pictorial Review
ER109-ED-X	Acute Right Flank Pain: Not Only Appendicitis!
ER110-ED-X	Imaging Approach for Acute Abdomen During Pregnancy: Common to Uncommon Causes
ER111-ED-X	Renal Causes of Acute Flank Pain: More Than Just Stones
ER112-ED-X	Bone Marrow Edema Detection by DECT: A Gamechanger in the Emergency Department
ER113-ED-X	Absent/Abnormal/Reduced Flow in Testis: Thinking Beyond Torsion
ER114-ED-X	Emergency Cases Resulting from Fish Bone Ingestion
ER115-ED-X	Dual Energy CT for Non-Traumatic Abdominal Emergency
ER116-ED-X	Recognizing Unusual and Atypical Patterns of Ischemic Stroke in the ED
ER117-ED-X	Pathologies of the IVC that Radiologists Need to See: Spectrum of Disorders Involving the IVC that are Encountered in the Emergency Room
ER118-ED-X	Don't Be Outflanked: The Role of Imaging in Retroperitoneal Trauma
ER119-ED-X	'Under Pressure' - Lessons Learnt from Overlooked Diaphragmatic Injuries
ER120-ED-X	MDCT Features of Bowel Ischemia: Spotlight on Non Occlusive Mesenteric Ischemia
ER121-ED-X	Cad Rads: An Important Tool for Reducing Cost in the Emergency Department - Real World Scenario
ER122-ED-X	Pelvic Fractures and Vascular Injuries - A Primer to Diagnostic Radiologists
ER123-ED-X	A Right Pain: Imaging-Pathologic Correlations in False Positive Diagnoses of Acute Appendicitis

ER124-ED-X	Pseudo-Trauma: Confounding Pre-Existing Pathologic Entities in Trauma Patients
ER125-ED-X	Twists and Turns: An Interactive Guide to Common as Well as Unusual Torsion of Solid Organs and Bowel
ER126-ED-X	Suspected Cord Compression: An MRI Primer for ED Radiologist
ER127-ED-X	Mimicking Appendicitis - Case Based Pictorial Review
ER128-ED-X	Comprehensive Imaging Review of Renal Trauma
ER129-ED-X	Twist of Fate: Multimodality Review of Abdominal and Pelvic Torsion
ER130-ED-X	DeLIVERing the Evidence: What Can We Learn About the Use of Endoscopic Retrograde Cholangiopancreatography (ERCP) in High Grade Liver Traumas?
ER131-ED-X	CT of Massive Nontraumatic Abdominal Hemorrhage: What the Radiologists Need to Know
ER132-ED-X	Thyroid Emergencies: What Radiologists Should Know
ER133-ED-X	Comprehensive Evaluation and Optimization of CT Imaging Strategies in Intrathecal Drug Delivery (ITDD) Failures
ER134-ED-X	Wooden Foreign Bodies and Penetrating Injuries
ER135-ED-X	Practical Guide to Acute Small Bowel Pathology: Spectrum of Diseases from the Run-of-the-Mill to Less Common Etiologies
ER136-ED-X	It's all in the Wrist!
ER137-ED-X	Imaging Evaluation of Tracheobronchial Injuries
ER138-ED-X	Contrast Enhanced US Appearance of Post-Traumatic Visceral Pseudoaneurysms and Active Extravasation - An Overview of Vascular Injuries
ER139-ED-X	Liver on the Edge: Emergency Complications of Cirrhosis and Hepatocellular Carcinoma
ER140-ED-X	IR in the ER: Interventional Radiology Emergencies

ER141-ED-X	Diverticulosis and Diverticulitis: The Bad and the Ugly
ER142-ED-X	The "Gynecological Acute Abdomen": A Multimodality Imaging Review of Gynecological Emergencies Causing Acute Abdominal Pain
ER143-ED-X	Multimodality Imaging of Abdominal Torsion: Clinical Feature and Differential Diagnosis
ER144-ED-X	Where Is the Air? How the Location of Gas Can Drastically Affect Management
ER145-ED-X	What's New in Evaluating Traumatic Solid Organ Injury? the Use of Contrast Enhanced Ultrasound (CEUS) in Conjunction with Traditional FAST and CECT in the Imaging Work-Up of Trauma
ER146-ED-X	Tricks and Tips for the Evaluation of Penetrating Cardiothoracic Trauma: From Big Issues to Subtle Lesions
ER147-ED-X	Radiology Response to Mass Casualty Incidents: Principles for Planning and Preparation
ER148-ED-X	Minimal Requirements for the Image Findings and Management of Pancreatic Trauma: What Should We Know?
ER149-ED-X	Pharyngoesophageal Foreign Bodies: Imaging Diagnosis and Clinical Significance
ER150-ED-X	Assessment of Blunt and Penetrating Abdominal Solid Organ Injuries in a Pediatric Population Using Contrast Enhanced Ultrasound (CEUS) and an Adapted Severity Grading System Using CEUS
ER151-ED-X	Acute Cervical Spine Trauma: Preliminary Observations and Experience with Novel 3D Cinematic Rendering
ER152-ED-X	How to Report Blunt and Penetrating Bowel Injuries: No Longer a Traumatic Experience!
ER153-ED-X	Imaging Adults After CPR, Including ECMO
ER154-ED-X	Unusual Vascular Trauma in Gunshot Wounds: Triggering the Right Diagnosis

- ER155-ED-X** Internal Bleeding After Labor: CT Findings Through a Case-based Review-When Time Matters
- ER156-ED-X** Evaluation of Vascular Pathologies with Novel 3D CT Cinematic Rendering
- ER157-ED-X** Rectal Emergencies: What You Have Always Wondered



INNOVATION FOR TOMORROW'S RADIOLOGY TODAY

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Don't miss this exciting centerpiece of the North Exhibit Hall! See the latest developments in ML and AI software and products. Plus, learn even more about this game-changing technology at the Machine Learning Theater featuring daily lunchtime presentations on the latest hot topics.

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