

Abstract: Acute chest pain is very common with a broad differential diagnosis, including pulmonary thromboembolism (PE). PE is typically diagnosed with computed tomography angiography (CTA). However, with improvements in magnetic resonance angiography (MRA) techniques and increasing concern over the growing use of computed tomography in medicine, there has been a growing interest in the use of pulmonary MRA for the diagnosis of PE. This presentation will review the use of pulmonary MRA for the diagnosis of PE, including

1. Clinical need for MRA in the evaluation of patients suspected of PE
2. Technical improvements in MRA that allow for consistent and accurate PE diagnosis
3. Clinical evidence comparing MRA to current clinical standards of reference.

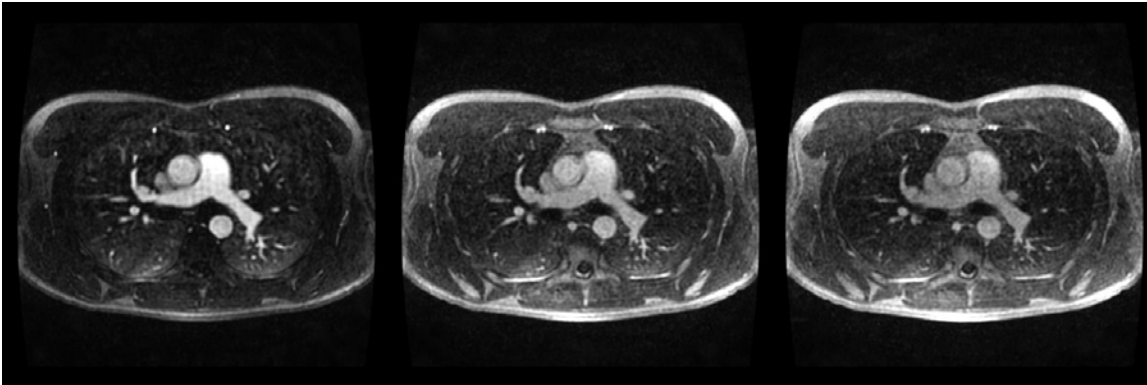


Figure 2 Multiphase contrast-enhanced MRA with parallel imaging allows for whole chest coverage with isotropic spatial resolution in a short, single breath-hold.

Following this presentation, attendees should be able to

1. Describe which advances in image acquisition have made the diagnosis of PE with MRA feasible
2. Identify the characteristic findings of PE findings on MRA
3. Distinguish between common artifacts and true PE on MRA
4. Evaluate the evidence on the use of MRA for PE.



Figure 1 Acute right upper lobe (arrow) and left upper lobe (circle) PE