



Level up your image quality with AIR™ Recon DL

Based on a webinar with Melany Atkins, MD, Fairfax Radiology Centers



Applying AI and deep-learning algorithms to MR image reconstruction is an exciting realization of technology that is enabling improvements in MR that haven't been possible using conventional reconstruction methods. Healthcare providers are using this technology to produce high-quality images with shorter scan times, overcoming the historical trade-offs in MR between scan time and image quality.

GE Healthcare's recent webinar featured a panel of clinicians discussing the impact of AI solutions on MR cases, from a clinical standpoint. They've seen improvements in productivity and return on investment (ROI) that impact their overall imaging operations and workflow.

Melanie Atkins, MD, a radiologist with Fairfax Radiology Centers in Fairfax, Virginia, presented clinical case studies illustrating the image quality and resolution improvements she's been able to achieve in her clinical practice using AIR™ Recon DL[†]. She presented clinical cases of MR imaging for cervical cancer, as well as magnetic resonance cholangiopancreatography (MRCP), a non-invasive imaging technique used to evaluate the liver, gallbladder, bile ducts, pancreas

and pancreatic duct for disease. Dr. Atkins was able to shorten the traditionally longer acquisition times for her patients' pelvic and abdominal exams, which often cause organ blur.

For her 91-year-old patient with dementia who really struggled in the MR scanner, Dr. Atkins explained that she tried to do rapid MRCP with AIR™ Recon DL and appreciated significant image quality improvement with utilizing AIR™ Recon DL (Fig. 1).

In study after study, Dr. Atkins noted that her patients are spending less time on the table, but she is getting superior image quality to inform clinical decisions on diagnosis and treatment. Her colleagues have also embraced the use of AIR™ Recon DL for all musculoskeletal and neuroimaging based on her clinical results.

“ [With AIR™ Recon DL for small FOV pelvic imaging] we decrease our NEX (number of excitations) to two, we've got just over two-and-a-half-minute acquisition time ..., but no issues with organ blur. And I think you can all appreciate that the image quality utilizing AIR™ Recon DL in a third of the time is really far superior. ”

Melany Atkins, MD
Fairfax Radiology Centers



Use the QR Code to get access to the full AIR™ Recon DL webinar with our panel of experts <http://tinyurl.com/intelligentlyefficient>

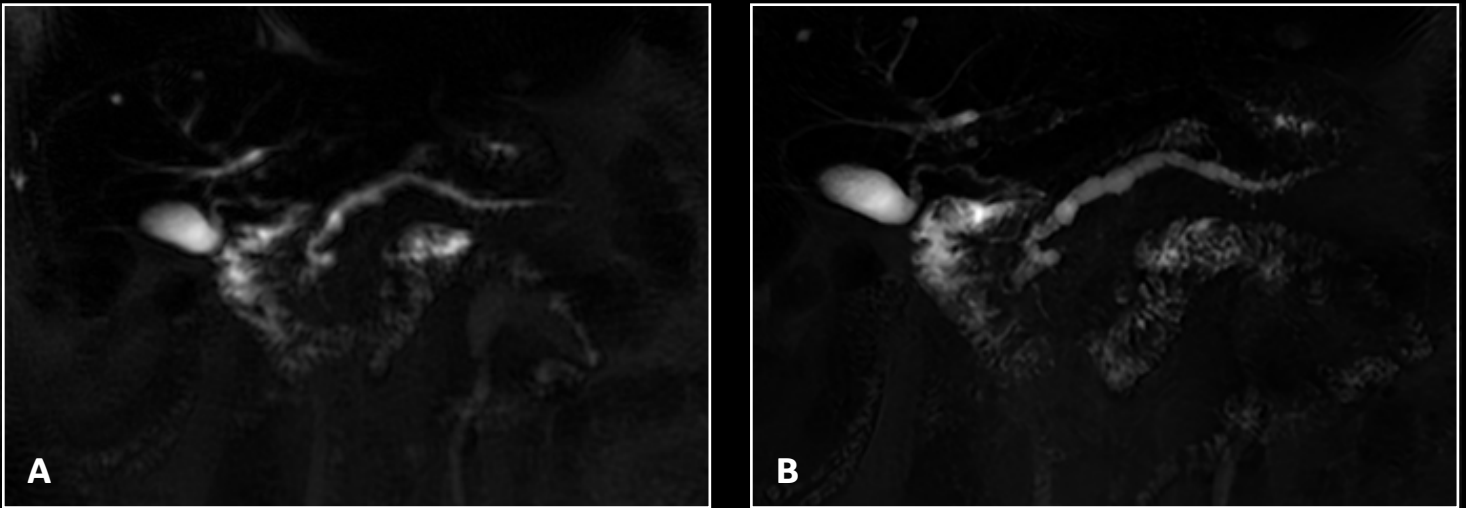


Figure 1. 2D MRCP of a 91 year-old patient with dementia. (A) without and (B) with AIR™ Recon DL.



Figure 2. Axial T2w FSE of a 63 year-old patient with elevated PSA, 0.5 x 0.6 x 3 mm. (A) High NEX 5, 6:46 min. with blur due to long acquisition, (B) low NEX 2, 2:39 min. with lower SNR due to lower NEX, and (C) same acquisition data as in (B) but reconstructed with AIR™ Recon DL showing higher SNR.

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