







Russell Low, M.D.

### Case 2

For Russell Low, M.D., radiologist at Sharp Children's Hospital (San Diego, CA), 30 percent of his practice is body MR imaging. "We currently have about the same volume of body as adult neuro, brain and spine studies; that's almost unheard of," Dr. Low said.

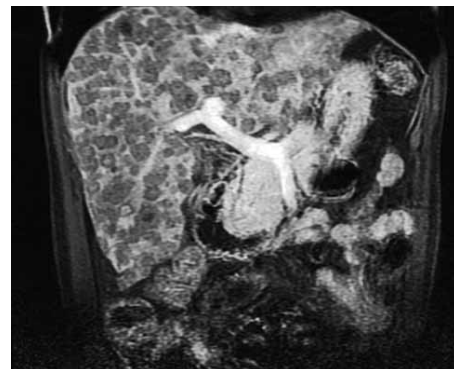
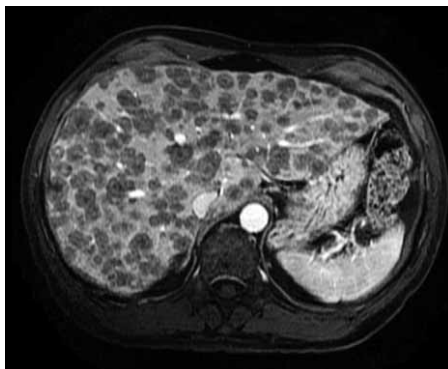
Initially installed by GE in 1991 as a long bore 4x scanner, the system was recently upgraded to an eight-channel Signa HDx 1.5T MR. "This system just runs and runs, and produces fabulous images," Dr. Low added. With 15 years experience in developing clinical applications in body imaging, Dr. Low has found his Signa HDx 1.5T to be a valuable tool.

With the upgrade to Signa HDx, Dr. Low immediately began to use LAVA and found it particularly useful for 3D dynamic gadolinium-enhanced abdominal imaging. "LAVA has certainly added to what we can do with 3D imaging. We have switched all our dynamic post-contrast imaging to LAVA. This is a fabulous sequence that produces the sharpest image quality and the most homogenous images of any sequence available today."

Dr. Low uses the SPECIAL fat suppression technique for nearly all abdomen studies, including hepatic and extrahepatic imaging. By using the 3D sequence and SPECIAL, Dr. Low can now acquire thinner slices. "The real difference with these gadolinium-enhanced LAVA images is their outstanding image quality. Before, I could acquire thin 3D slice sections but the image quality was lacking and inconsistent. On most MR systems, 2D gradient-echo images are inherently sharper and show better contrast than 3D gradient-echo images. But with LAVA, I cannot tell the 2D and 3D gradient-echo images apart, and that is impressive."

From Dr. Low's perspective, options like ASSET should be standard practice in the industry. "The next challenge is to see how far we can push acceleration factors, beyond the current practice of 2. Can we use acceleration factors of 3, 4, 5 or 6? What is the upper boundary that maintains image quality while increasing speed with greater acceleration factors? We still must define the perfect balance.

Currently, our GE HD MR scanner produces consistently very good LAVA images with very sharp detail and great contrast," he added. ■



Patient with diffuse liver metastases from lung cancer